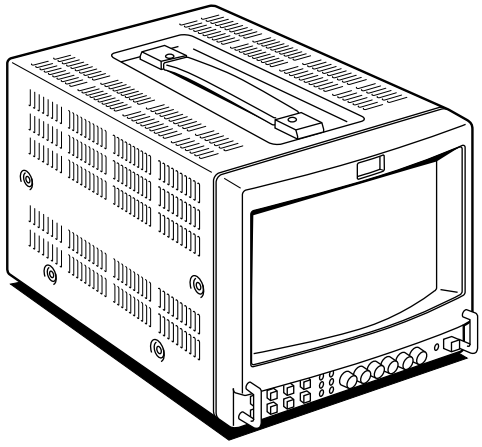
SERVICE MANUAL

S MIC CHASSIS

MODEL	DEST.	CHASSIS NO.
PVM-8042Q	US/CND	SCC-E96H-A
PVM-8045Q	US/CND	SCC-E96J-A

MODEL	DEST.	CHASSIS NO.
PVM-9042QM	AEP	SCC-F09H-A
PVM-9042QM	AUS	SCC-F90F-A
PVM-9045QM	AEP	SCC-F09J-A
PVM-9045QM	AUS	SCC-F90G-A
PVM-9045PM	BRZ	SCC-F31B-A



TRINITRON® COLOR VIDEO MONITOR

SONY®

⚠WARNING

This manual is intended for qualified service personnel only.

To reduce the risk of electric shock, fire or injury, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so. Refer all servicing to qualified service personnel.

WARNING!!

AN ISOLATION TRANSFORMER SHOULD BE USED DURING ANY SERVICE TO AVOID POSSIBLE SHOCK HAZARD, BECAUSE OF LIVE CHASSIS.

THE CHASSIS OF THIS RECEIVER IS DIRECTLY CONNECTED TO THE AC POWER LINE.

ATTENTION!!

AFIN D'EVITER TOUT RISQUE D'ELECTROCUTION PROVENANT D'UN CHÁSSIS SOUS TENSION, UN TRANSFORMATEUR D'ISOLEMENT DOIT ETRE UTILISÉ LORS DE TOUT DÉPANNAGE.

LE CHÁSSIS DE CE RÉCEPTEUR EST DIRECTEMENT RACCORDÉ À L'ALIMENTATION SECTEUR.

SAFETY-RELATED COMPONENT WARNING!!

COMPONENTS IDENTIFIED BY MARK ⚠ ON THE SCHEMATIC DIAGRAMS, EXPLODED VIEWS AND IN THE PARTS LIST ARE CRITICAL TO SAFE OPERATION. REPLACE THESE COMPONENTS WITH SONY PARTS WHOSE PART NUMBERS APPEAR AS SHOWN IN THIS MANUAL OR IN SUPPLEMENTS PUBLISHED BY SONY. CIRCUIT ADJUSTMENTS THAT ARE CRITICAL TO SAFE OPERATION ARE IDENTIFIED IN THIS MANUAL. FOLLOW THESE PROCEDURES WHENEVER CRITICAL COMPONENTS ARE REPLACED OR IMPROPER OPERATION IS SUSPECTED.

ATTENTION AUX COMPOSANTS RELATIFS À LA SÉCURITÉ!!

LES COMPOSANTS IDENTIFIÈS PAR UNE TRAME ET PAR UNE MARPUE ⚠ SUR LES SCHÉMAS DE PRINCIPE, LES VUES EXPLOSÉES ET LES LISTES DE PIECES CONT D'UNE IMPORTANCE CRITIQUE PUR LA SÉCURITÉ DU FONCTIONNEMENT. NE LES REMPLACER QUE PAR DES COMPOSANTS SONY DONT LE NUMÉRO DE PIÉCE EST INDIQUÉ DANS LE PRÉSENT MANUEL OU DANS DES SUPPLÉMENTS PUBLIÉS PAR SONY. LES RÉGLAGES DE CIRCUIT DONT L'IMPORTANCE EST CRITIQUE POUR LA SÉCURITÉ DU FONCTIONNEMENT SONT IDENTIFIES DANS LE PRÉSENT MANUEL. SUIVRE CES PROCÉDURES LORS DE CHAQUE REMPLACEMENT DE COMPOSANTS CRITIQUES, OU LORSQU'UN MAUVAIS FONCTIONNEMENT EST SUSPECTÉ.

TABLE OF CONTENTS

5. CIRCUIT ADJUSTMENTS

6. SEMICONDUCTORS

7. EXPLODED VIEWS

8. ELECTRICAL PARTS LIST

9. BLOCK DIAGRAMS

10. DIAGRAMS

SONY

3-865-058-**11** (1)

Trinitron® Color Video Monitor

Trinitron

PVM-8045Q

Trinitron

PVM-8042Q
PVM-8040

SECTION 1
OPERATING INSTRUCTIONS

This section is extracted from operating instructions.

English

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

Dangerously high voltages are present inside the unit. Do not open the cabinet. Refer servicing to qualified personnel only.

THIS APPARATUS MUST BE EARTHED

This symbol is intended to alert the user to the presence of uninsulated “dangerous voltage” within the product’s enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For the customers in the USA

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

In the event of a malfunction or when maintenance is necessary, consult an authorized Sony dealer.

Ensure that your equipment is connected correctly.
If you are in any doubt consult a qualified electrician.

CAUTION:

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

Precautions

On safety

- **PVM-8045Q/8042Q:** Operate the unit on 120 V AC or 12 V DC. For the AC operation, use only the supplied AC power cord or the AC power adaptor recommended (not supplied). Do not use any other type.
  For the battery operation, use only the NP-1B battery pack and BP-L60A/L90A with DC-L10 (not supplied). Do not use any other batteries.
- **PVM-8040:** Operate the unit only on 120 V AC. Use only the supplied AC power cord. Do not use any other type.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it further.
- Unplug the unit from the wall outlet if it is not to be used for several days.
- To disconnect the AC power cord, pull it out by the plug. Never pull the cord itself.

On installation

- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Do not install the unit near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Keep the unit away from a loudspeaker or motor, as the picture may be affected.

On cleaning

Clean the unit with a slightly dampened soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzine as they might damage the finish of the cabinet.
As a safety precaution, unplug the unit before cleaning it.

On repacking

Retain the original carton and packing materials for safe transport of this unit in the future.

If you have any questions about this unit, contact your authorized Sony dealer.

ATTENTION – When the product is installed in a rack:

a) Elevated operating ambient temperature
If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the manufacturer’s maximum rated ambient temperature of 0 to +35°C (32 to 95°F) (Tmra).

b) Reduced air flow
Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

c) Mechanical loading
Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

d) Circuit overloading
Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

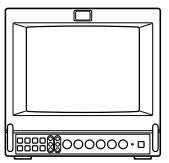
e) Reliable earthing
Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g., use of power strips).

f) Gap keeping
The upper and lower gaps of rack-mounted equipment should be least 44 mm (1 3/4 inches).

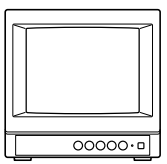
Table of Contents

This instruction manual covers the PVM-8045Q, PVM-8042Q and PVM-8040. The differences among the models are clearly described in the text.

PVM-8045Q/8042Q



PVM-8040



Features

Four color systems available (PVM-8045Q/8042Q only)
The monitor can display NTSC, PAL, SECAM and NTSC4.43[1)] signals. The appropriate color system is selected automatically.

HR (High Resolution) Trinitron® [2)] picture tube (PVM-8045Q)
The HR Trinitron picture tube (0.25 mm aperture grill pitch) provides a high resolution picture. Horizontal resolution is more than 450 TV lines at the center of the picture.

Trinitron picture tube (PVM-8042Q/8040)
The Trinitron picture tube (0.5mm aperture grill pitch) provides a high resolution picture. Horizontal resolution is more than 250 TV lines at the center of the picture.

Beam current feedback circuit
The built-in beam current feedback circuit assures stable white balance.

Comb filter
When NTSC video signals are received, a comb filter activates to increase the resolution, resulting fine picture detail without color spill or color noise.

Multiple input signals (PVM-8045Q/8042Q only)
In addition to the composite video signals and the Y/C signals, analog RGB signals and component signals can be input.

External sync input (PVM-8045Q/8042Q only)
When the EXT SYNC button is pressed, the monitor can be operated on the sync signal fed through an external sync connector.

Blue only picture (PVM-8045Q/8042Q only)
Black and white apparent picture consisting from only the blue signal will be displayed. This facilitates the “chroma” and “phase” adjustment, and the observation of the video noise.

16:9 selector (PVM-8045Q/8042Q only)
The monitor can display the 16:9 signal with the correct ratio of width and height, compressing the picture vertically.

Under scan mode (PVM-8045Q/8042Q only)
The monitor can display signals that are scanned outside the normal screen so you can monitor the whole image.

Audio circuit and built-in speaker
A speaker (0.5 W, monaural) is built into the monitor for sound monitoring.

Automatic/Manual DEGAUSS
The screen is automatically demagnetized when the monitor is turned on. Manual degauss is also available for PVM-8045Q/8042Q by pressing the DEGAUSS button.

Automatic termination
(only connectors marked ⊣⋀⊢)
The Y/C, VIDEO IN and EXT SYNC IN connectors are terminated at 75 ohms inside, when no cable is connected to the loop-through output connectors. When a cable is connected to an output connector, the 75-ohm termination is automatically released.

EIA standard 19-inch rack mounting
By using an MB-507 mounting bracket (not supplied), the monitor can be mounted in an EIA standard 19-inch rack. For details on mounting, see the instruction manual of the MB-507.

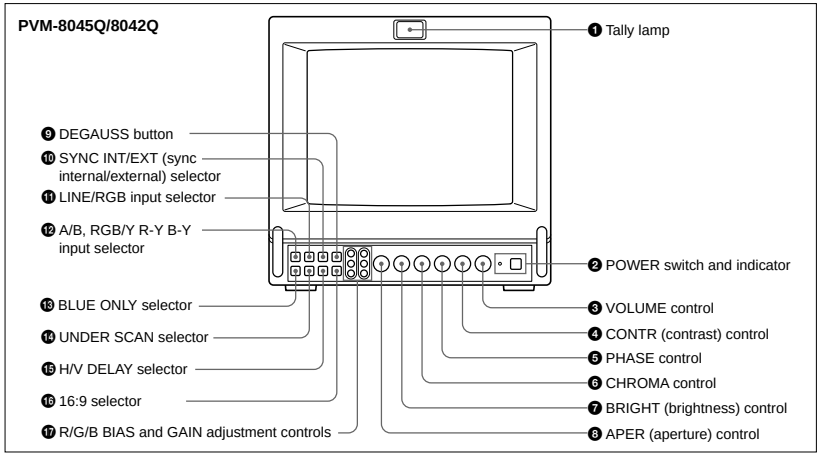
Varied power sources
In addition to AC power, you can use battery pack or external DC 12 V power. The monitor can operate with one or two Sony NP-1B* battery packs. If you use the DC-L10* battery adaptor, the monitor can operate with a Sony BP-L60A/L90A* lithium ion battery pack.

* The NP-1B battery pack, DC-L10 battery adaptor and BP-L60A/L90A battery pack are not supplied.

1) An NTSC 4.43 signal is used for playing back NTSC-recorded video cassettes with a video tape recorder/player especially designed for use with this system.
2) Trinitron is a trademark of Sony Corporation.

Location and Function of Parts and Controls

Front



❶ Tally lamp
This indicator lights up. The tally control connection is needed.
For the pin assignment, see "Specificatons" on page 12 (US).

❷ POWER switch and indicator
Depress to turn the monitor on. The indicator will light up in green.
The POWER indicator also functions as the battery indicator. When the internal battery becomes weak or the power supplied through the DC 12 V IN jack decreases, the indicator flashes.

❸ VOLUME control
Turn this control clockwise or counterclockwise to obtain the desired volume.

❹ CONTR (contrast) control
Turn clockwise to make the contrast stronger and counterclockwise to make it weaker.

❺ PHASE control
This control is effective only for the NTSC and NTSC4.43 color systems. Turn clockwise to make the skin tones greenish and counterclockwise to make them purplish.

❻ CHROMA control
Turn clockwise to make the colour intensity stronger and counterclockwise to make it weaker.

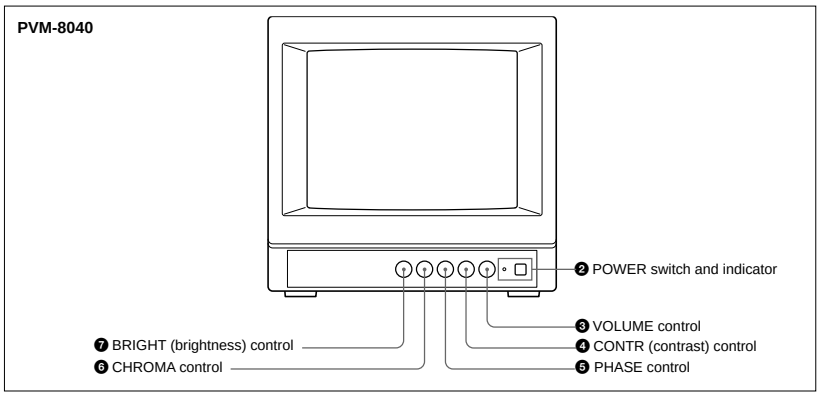
❼ BRIGHT (brightness) control
Turn clockwise for more brightness and counterclockwise for less.

❽ APER (aperture) control
Turn clockwise for more sharpness and counterclockwise for less.

Notes
- The PHASE, CHROMA and APER control settings have no effect on an analog RGB signal.
- The PHASE control has no effect on component signals.
- The PHASE control setting is effective only for the NTSC system.

❾ DEGAUSS button
Press this button momentarily. The screen will be demagnetized.

Note
If you press the DEGAUSS button again too soon, the color shades may be uneven.



❿ SYNC INT/EXT (sync internal/external) selector
Keep this button released (INT) to operate the monitor on the sync signal from the displayed composite video signal.
Depress this button (EXT) to operate the monitor on an external sync signal fed through the EXT SYNC connector on the rear panel.

⓫ LINE/RGB input selector
Select the programme to be monitored. Keep this button released (LINE) for a signal fed through the LINE A or LINE B connectors. Depress this button (RGB) for a signal fed through the RGB connectors.

⓬ A/B, RGB/Y R-Y B-Y input selector
When the LINE/RGB input selector is set to LINE, keep this button released (A) for a signal fed through the LINE A connectors. Press this button (B) to monitor the signals from the LINE B connector.

When the LINE/RGB input selector is set to RGB, select the RGB signal or the component signal which is fed through the RGB input connectors. Keep this button released (RGB) for the RGB signal. Press this button (Y R-Y B-Y) to monitor the component signals.

⓭ BLUE ONLY selector
Depress this button to turn off the red and green signals. A blue signal is displayed as an apparent monochrome picture on the screen. This facilitates "chroma" and "phase" control adjustments and the observation of video noise.

Note
The PHASE control adjustments is effective only for the NTSC system.

⓮ UNDER SCAN selector
Depress this button for underscanning. The display size is reduced by approximately 3% so that four corners of the picture are visible.

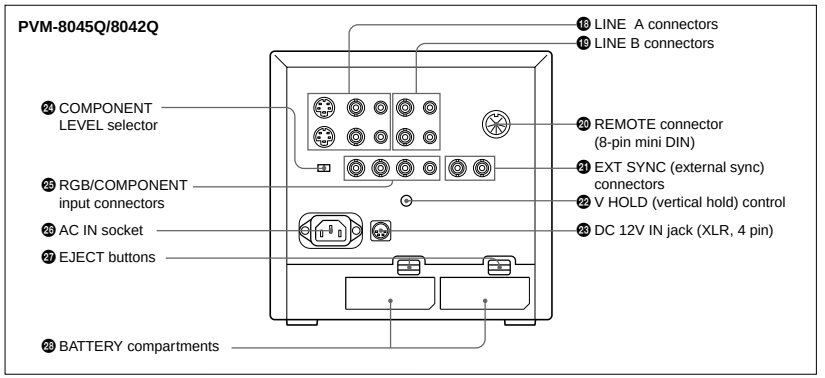
⓯ H/V DELAY selector
Depress this button to observe the horizontal and vertical sync signals at the same time. The horizontal sync signal is displayed in the left quarter of the screen; the vertical sync signal is displayed near the center of the screen.

⓰ 16:9 selector
Press this selector to monitor the signals of 16:9 picture.
Pressing the UNDER SCAN selector ⓮ in 16:9 mode displays the whole 16:9 picture up to the four corners.

⓱ R/G/B BIAS and GAIN adjustment controls
Used for white balance fine adjustment.
BIAS and GAIN controls are provided for the R (red), G (green) and B (blue) screens.
BIAS: Adjust the white balance and brightness of the screen at the lowlight.
GAIN: Adjust the white balance and brightness of the screen at the highlight.

Location and Function of Parts and Controls

Rear



⓲ LINE A connectors (PVM-8045Q/8042Q)
⓲ LINE connectors (PVM-8040)

Y/C IN (4-pin mini DIN): Connect to the Y/C separate output of a video camera, VCR or other video equipment.

Y/C OUT (4-pin mini DIN): Loop-through output of the Y/C IN connector. Connect to the Y/C separate input of a VCR or another monitor.

VIDEO IN (BNC): Connect to the video output of a video camera, VCR or other video equipment.

VIDEO OUT (BNC): Loop-through output of the VIDEO IN connector. Connect to the video input of a VCR or another monitor.

AUDIO IN (phono jack): Connect to the audio output of a VCR or a microphone (through a suitable microphone amplifier).

AUDIO OUT (phono jack): Loop-through output of the AUDIO IN connector. Connect to the audio input of a VCR or another monitor.

Note

The Y/C IN connector has a priority over the VIDEO IN connector.
When a plug is connected to the Y/C IN connector, the VIDEO IN connector is automatically disconnected.

Note

(PVM-8045Q/8042Q only)
To monitor the signal fed through these connectors, keep the LINE/RGB selector and the A/B, RGB/Y R-Y B-Y selector on the front panel released (LINE and A).

⓳ LINE B connectors

To monitor the signal fed through these connectors, keep the LINE/RGB selector released (LINE) and depress the A/B, RGB/Y R-Y B-Y selector on the front panel (B).

VIDEO IN (BNC): Connect to the video output of a video camera, VCR or other video equipment.

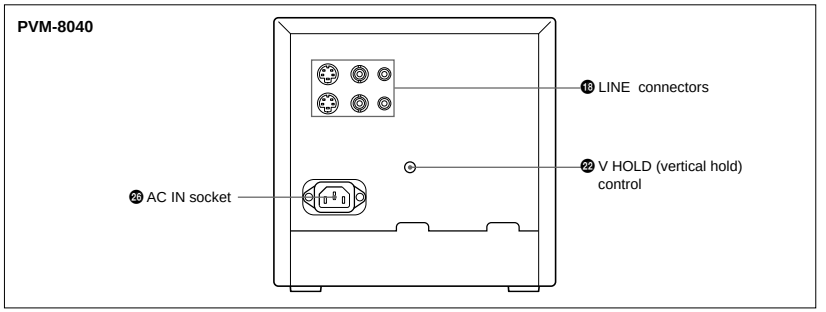
VIDEO OUT (BNC): Loop-through output of the VIDEO IN connector. Connect to the video input of a VCR or another monitor.

AUDIO IN (phono jack): Connect to the audio output of a VCR or a microphone (through a suitable microphone amplifier).

AUDIO OUT (phono jack): Loop-through output of the AUDIO IN connector. Connect to the audio input of a VCR or another monitor.

⓴ REMOTE connector (8-pin mini DIN)

Connect to the tally output of a control console, special-effect generator, etc. The tally lamp on the front panel will be turned on and off by the connected equipment. This connector can be used for connecting a remote controller.
For the pin assignment of this connector, see "Specifications" on page 12 (US).



㉑ EXT SYNC (external sync) connectors

IN (BNC): When this monitor operates on an external sync signal, connect the reference signal from a sync generator to this connector. In this case, depress the SYNC INT/EXT selector on the front panel (EXT).

OUT (BNC): Loop-through output of the EXT SYCN IN connector. Connect to the external sync input of video equipment to be synchronized with this monitor.

㉒ V HOLD (vertical hold) control

Turn to stabilize the picture if it rolls vertically.

㉓ DC 12V IN jack (XLR, 4 pin)

Connect the Sony battery adaptor DC-L10 (not supplied).

㉔ COMPONENT LEVEL selector

Select the component level from among two modes.
N10/SMPTE: for 100/0/100/0 signal
BETA 0: for 100/0/75/0 signal

㉕ RGB/COMPONENT input connectors

R/R-Y, G/Y, B/B-Y (BNC), AUDIO (phono):
To monitor a signal fed through these connectors, depress the LINE/RGB selector on the front panel (RGB). When the SYNC INT/EXT selector on the front paner is released (INT), the monitor operates on the sync signal from the G/Y channel.

To monitor the analog RGB signal

Connect to the analog RGB signal outputs of a video camera. Keep the A/B, RGB/Y R-Y B-Y selector on the front panel released (RGB).

To monitor the component signal

Connect to the R-Y/Y/B-Y componenet signal outputs of a Sony BetaCam video camera. Depress the A/B, RGB/Y R-Y B-Y selector on the front panel (Y R-Y B-Y).

㉖ AC IN socket

Connect the supplied AC power cord to this socket and to a wall outlet.

㉗ EJECT buttons

Press the EJECT button upwards to remove the battery pack.

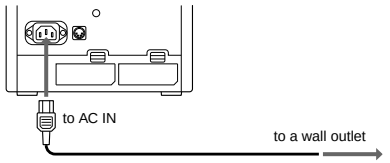
㉘ BATTERY compartments

Insert the NP-1B battery pack (not supplied).

Power Sources

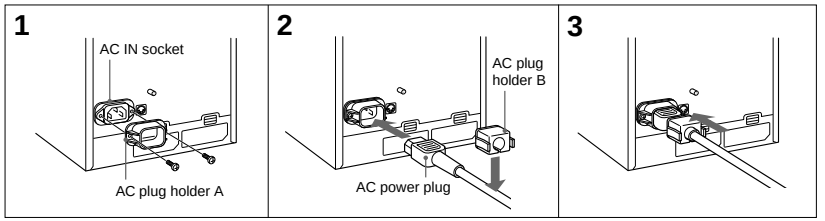
House Current (for all models)

Connect the supplied AC power cord to the AC IN socket and to a wall outlet.



For the PVM-8045Q/8042Q
When the AC power cord is plugged into the AC IN socket, the battery pack (if installed) or the AC power adaptor (if connected) is automatically disconnected.

To connect an AC power cord securely with AC plug holders.



1 Remove the AC IN socket screws and then use them to attach the AC plug holder A (supplied) to the AC IN socket.

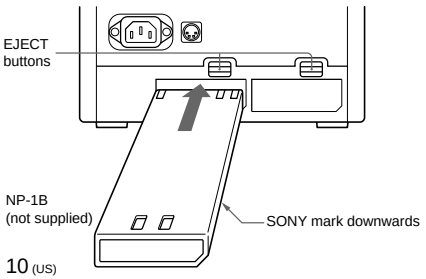
2 Plug the power cord to the AC IN sokcet. Then, attach the supplied AC plug holder B on top of the AC power cord.

3 Slide AC plug holder B over the cord until is locks.

To remove the AC power cord
Pull out AC plug holder B by squeezing the left and right sides.

Rechargeable Battery (PVM-8045Q/8042Q only)

The monitor can operate with one or two battery packs. For extended use, two battery packs are recommended.



To remove the battery pack, press the EJECT button upwards.

For charging, use the BC-1WD for the NP-1B.

Note
Make sure you disconnect the cables connected to the connectors (AC IN, DC 12 V IN) at the rear of the monitor. Otherwise, the monitor cannot operate on the battery pack(s).

Specifications

Video signal

Colour system	PVM-8045Q/8042Q: NTSC, PAL, SECAM, NTSC4.43 PVM-8040: NTSC
Resolution	PVM-8045Q: 450 TV lines PVM-8042Q/8040: 250 TV lines
Aperture correction	–4.0 dB to +6.0 dB (at 3.0 MHz)
Frequency response	6.0 MHz (–3.0 dB) at all inputs
Synchronization	AFC time constant 1.0 msec.

Picture performance

Normal scan	6% over scan of CRT effective screen area
Underscan	3% underscan of CRT effective screen area
H. linearity	Less than 5.0% (typical)
V. linearity	Less than 5.0% (typical)
Convergence	Central area: 0.43 mm (typical) Peripheral area: 0.53 mm (typical)
Raster size stability	H: 1.0%, V: 1.5%
High voltage regulation	3.0%
Color temperature	D65

Inputs and Outputs

Connector	Model	PVM-8045Q PVM-8042Q	PVM-8040
LINE A	Y/C IN	yes	yes
	Y/C OUT	yes	yes
	VIDEO IN	yes	yes
	VIDEO OUT	yes	yes
	AUDIO IN	yes	yes
	AUDIO OUT	yes	yes
LINE B	VIDEO IN	yes	no
	VIDEO OUT	yes	no
	AUDIO IN	yes	no
	AUDIO OUT	yes	no
RGB/ COMPONENT	R/R-Y IN	yes	no
	G/Y IN	yes	no
	B/B-Y IN	yes	no
	AUDIO IN	yes	no
EXT SYNC	IN	yes	no
	OUT	yes	no
REMOTE		yes	no

Inputs
- Y/C IN: 4-pin mini DIN connector
  See the pin assignment on page 12 (US).
- VIDEO IN: BNC connector
  1 Vp-p ± 6 dB, sync negative
- AUDIO IN: phono jack, –5 dBu[a], less than 47 kohms
- R/R-Y, G/Y, B/B-Y: BNC connector
  R, G, B channels: 0.7 Vp-p, ± 6 dB Sync on green: 0.3 Vp-p, negative,
  R-Y, Y, B-Y channels: 0.7 Vp-p, ±6 dB (Standard colour bar signal of 75% chrominance)
- EXT SYNC IN: BNC connector
  Composite sync 4 Vp-p, ±6 dB, negative

Loop-through outputs
- Y/C OUT: 4-pin mini DIN connector, 75 ohms terminated (75 ohms automatic termination)
- VIDEO OUT: BNC connector, 75 ohms terminated (75 ohms automatic termination)
- AUDIO OUT: phono jack
- EXT SYNC OUT: BNC connector, 75 ohms terminated

Speaker output: Output level 0.5 W

Remote input: REMOTE: 8-pin mini DIN connctor (75 ohms automatic termination)
See the pin assignment on page 12 (US).

a) 0 dBu = 0.775 Vr.m.s.

General

Power consumption & requirements
- PVM-8045Q/8042Q:
  0.6 A 45 W MAX at 120 V AC operation
  3.7 A 38 W at 12 V DC operation
- PVM-8040:
  0.6 A 39 W MAX at 120 V AC operation

Operating conditions

Temperature	0 to +35°C (32 to 95°F)
Humidity	0 to 90% (no condensation)
Pressure	700 to 1060 hPa

Specifications

Transport and storage conditions
- Temperature: –10 to +40°C (14 to 104°F)
- Humidity: 0 to 90%
- Pressure: 700 to 1060 hPa

Dimensions: Approx. 217 x 217 x 352.5 mm (w/h/d) (8 5/8 × 8 5/8 × 14 inches) not incl. projecting parts and controls

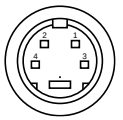
Mass: Approx. 8.2 kg (18 lb 1 oz) not incl. battery packs

Accessory supplied: AC power cord (1)
Cable with an 8-pin connector (1) (PVM-8045Q/8042Q only)
AC plug holders (1 set)
Tally plate (1) (PVM-8045Q/8042Q only)

Design and specifications are subject to change without notice.

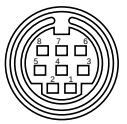
Pin Assignment

Y/C IN connector (4-pin mini DIN)



Pin No.	Signal	Description
1	Y-input	1 Vp-p, sync negative, 75 ohms
2	CHROMA sub-carrier-input	286 mVp-p (NTSC), burst Delay time between Y and C: within 0 ±100 nsec., 75 ohms
3	GND for Y-input	GND
4	GND for CHROMA-input	GND

REMOTE connector (8-pin mini DIN)
(PVM-8045Q/8042Q only)



Pin No.	Signal
1	16:9
2	H/V delay
3	GND
4	EXT SYNC
5	Tally
6	Underscan
7	A/B or RGB/Y R-Y B-Y
8	LINE/RGB

Notes
- For remote control, connect the pin of the desired function to pin 3 (GND).
- For remote control, set the front button to OFF (the switch is out).

SONY

3-865-058-**21** (1)

Trinitron® Color Video Monitor

Trinitron

PVM-9045QM

Trinitron

PVM-9042QM
PVM-9040ME

English

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

Dangerously high voltages are present inside the unit. Do not open the cabinet. Refer servicing to qualified personnel only.

In the event of a malfunction or when maintenance is necessary, consult an authorized Sony dealer.

THIS APPARATUS MUST BE EARTHED

For the customers in the UNITED KINGDOM

IMPORTANT
The wires in this mains lead are coloured in accordance with the following code:

Green-and-yellow	**: Earth**
Blue	**: Neutral**
Brown	**: Live**

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows:
The wire which is coloured green-and-yellow must be connected to the terminal in the plug which is marked with the letter E or by the safety earth symbol ⏚ or coloured green or green-and-yellow.
The wire which is coloured blue must be connected to the terminal which is marked with the letter N or coloured black.
The wire which is coloured brown must be connected to the terminal which is marked with the letter L or coloured red.

Ensure that your equipment is connected correctly.
If you are in any doubt consult a qualified electrician.

CAUTION:
Danger of explosion if battery is incorrectly replaced.
Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

Voor de klanten in Nederland

Bij dit produkt zijn batterijen geleverd. Wanneer deze leeg zijn, moet u ze niet weggooien maar inleveren als KCA.

Precautions

On safety

- **PVM-9045QM/9042QM:** Operate the unit on 100 - 240 V AC or 12 V DC. For the AC operation, use only the supplied AC power cord or the AC power adaptor recommended (not supplied). Do not use any other type.
  For the battery operation, use only the NP-1B battery pack and BP-L60A/L90A with DC-L10 (not supplied). Do not use any other batteries.
- **PVM-9040ME:** Operate the unit only on 100 - 240 V AC. Use only the supplied AC power cord. Do not use any other type.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it further.
- Unplug the unit from the wall outlet if it is not to be used for several days.
- To disconnect the AC power cord, pull it out by the plug. Never pull the cord itself.

On installation

- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Do not install the unit near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Keep the unit away from a loudspeaker or motor, as the picture may be affected.

On cleaning

Clean the unit with a slightly dampened soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzine as they might damage the finish of the cabinet.
As a safety precaution, unplug the unit before cleaning it.

On repacking

Retain the original carton and packing materials for safe transport of this unit in the future.

If you have any questions about this unit, contact your authorized Sony dealer.

ATTENTION – When the product is installed in a rack:

a) Elevated operating ambient temperature
If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the manufacturer's maximum rated ambient temperature of 0 to +35°C (32 to 95°F) (Tmra).

b) Reduced air flow
Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

c) Mechanical loading
Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

d) Circuit overloading
Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

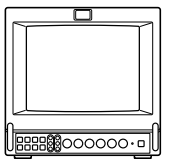
e) Reliable earthing
Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g., use of power strips).

f) Gap keeping
The upper and lower gaps of rack-mounted equipment should be least 44 mm (1 3/4 inches).

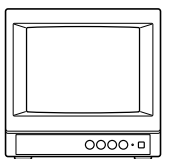
Table of Contents

This instruction manual covers the PVM-9045QM, PVM-9042QM and PVM-9040ME.
The differences among the models are clearly described in the text.

PVM-9045QM/9042QM



PVM-9040ME



Features

Four colour systems available (PVM-9045QM/9042QM only)
The monitor can display PAL, SECAM, NTSC and NTSC4.43[1] signals. The appropriate colour system is selected automatically.

HR (High Resolution) Trinitron® [2] picture tube (PVM-9045QM)
The HR Trinitron picture tube (0.25 mm aperture grill pitch) provides a high resolution picture. Horizontal resolution is more than 450 TV lines at the center of the picture.

Trinitron picture tube (PVM-9042QM/9040ME)
The Trinitron picture tube (0.5mm aperture grill pitch) provides a high resolution picture. Horizontal resolution is more than 250 TV lines at the center of the picture.

Beam current feedback circuit
The built-in beam current feedback circuit assures stable white balance.

Multiple input signals (PVM-9045QM/9042QM only)
In addition to the composite video signals and the Y/C signals, analog RGB signals and component signals can be input.

External sync input (PVM-9045QM/9042QM only)
When the EXT SYNC button is pressed, the monitor can be operated on the sync signal fed through an external sync connector.

Blue only picture (PVM-9045QM/9042QM only)
Black and white apparent picture consisting from only the blue signal will be displayed. This facilitates the chroma adjustment, and the observation of the video noise.

16:9 selector (PVM-9045QM/9042QM only)
The monitor can display the 16:9 signal with the correct ratio of width and height, compressing the picture vertically.

Under scan mode (PVM-9045QM/9042QM only)
The monitor can display signals that are scanned outside the normal screen so you can monitor the whole image.

Audio circuit and built-in speaker
A speaker (0.5 W, monaural) is built into the monitor for sound monitoring.

Automatic/Manual DEGAUSS
The screen is automatically demagnetized when the monitor is turned on. Manual degauss is also available for PVM-9045QM/9042QM by pressing the DEGAUSS button.

Automatic termination
(only connectors marked ⊣⋀⊢)
The Y/C, VIDEO IN and EXT SYNC IN connectors are terminated at 75 ohms inside, when no cable is connected to the loop-through output connectors. When a cable is connected to an output connector, the 75-ohm termination is automatically released.

EIA standard 19-inch rack mounting
By using an MB-507 mounting bracket (not supplied), the monitor can be mounted in an EIA standard 19-inch rack. For details on mounting, see the instruction manual of the MB-507.

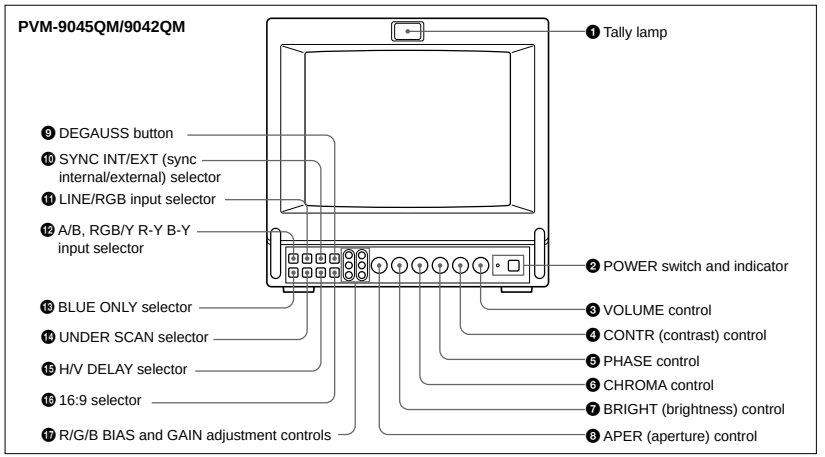
Varied power sources
In addition to AC power, you can use battery pack or external DC 12 V power. The monitor can operate with one or two Sony NP-1B* battery packs. If you use the DC-L10* battery adaptor, the monitor can operate with a Sony BP-L60A/L90A* lithium ion battery pack.

* The NP-1B battery pack, DC-L10 battery adaptor and BP-L60A/L90A battery pack are not supplied.

1) An NTSC 4.43 signal is used for playing back NTSC-recorded video cassettes with a video tape recorder/player especially designed for use with this system.
2) Trinitron is a trademark of Sony Corporation.

Location and Function of Parts and Controls

Front



❶ Tally lamp
This indicator lights up. The tally control connection is needed.
For the pin assignment, see "Specificatons" on page 12 (GB).

❷ POWER switch and indicator
Depress to turn the monitor on. The indicator will light up in green.
The POWER indicator also functions as the battery indicator. When the internal battery becomes weak or the power supplied through the DC 12 V IN jack decreases, the indicator flashes.

❸ VOLUME control
Turn this control clockwise or counterclockwise to obtain the desired volume.

❹ CONTR (contrast) control
Turn clockwise to make the contrast stronger and counterclockwise to make it weaker.

❺ PHASE control
This control is effective only for the NTSC and NTSC4.43 colour systems. Turn clockwise to make the skin tones greenish and counterclockwise to make them purplish.

❻ CHROMA control
Turn clockwise to make the colour intensity stronger and counterclockwise to make it weaker.

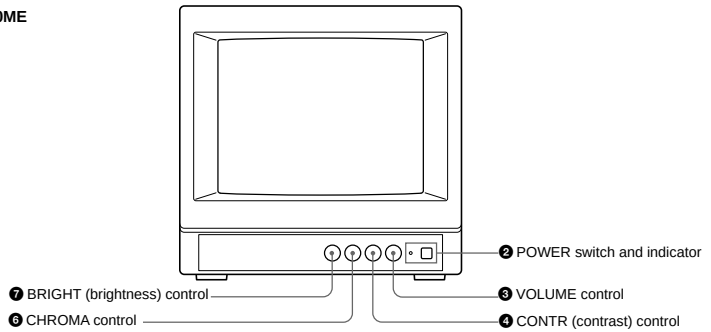
❼ BRIGHT (brightness) control
Turn clockwise for more brightness and counterclockwise for less.

❽ APER (aperture) control
Turn clockwise for more sharpness and counterclockwise for less.

Notes
- The PHASE, CHROMA and APER control settings have no effect on an analog RGB signal.
- The PHASE control has no effect on component signals.
- The PHASE control setting is effective only for the NTSC system.

❾ DEGAUSS button
Press this button momentarily. The screen will be demagnetized.

Note
If you press the DEGAUSS button again too soon, the color shades may be uneven.



❿ SYNC INT/EXT (sync internal/external) selector
Keep this button released (INT) to operate the monitor on the sync signal from the displayed composite video signal.
Depress this button (EXT) to operate the monitor on an external sync signal fed through the EXT SYNC connector on the rear panel.

⓫ LINE/RGB input selector
Select the programme to be monitored. Keep this button released (LINE) for a signal fed through the LINE A or LINE B connectors. Depress this button (RGB) for a signal fed through the RGB connectors.

⓬ A/B, RGB/Y R-Y B-Y input selector
When the LINE/RGB input selector is set to LINE, keep this button released (A) for a signal fed through the LINE A connectors. Press this button (B) to monitor the signals from the LINE B connectors.

When the LINE/RGB input selector is set to RGB, select the RGB signal or the component signal which is fed through the RGB input connectors. Keep this button released (RGB) for the RGB signal. Press this button (Y R-Y B-Y) to monitor the component signals.

⓭ BLUE ONLY selector
Depress this button to turn off the red and green signals. A blue signal is displayed as an apparent monochrome picture on the screen. This facilitates "chroma" control adjustments and the observation of video noise.

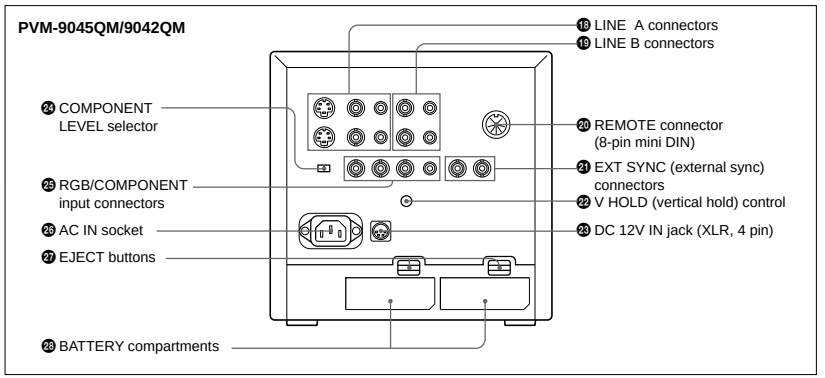
⓮ UNDER SCAN selector
Depress this button for underscanning. The display size is reduced by approximately 3% so that four corners of the picture are visible.

⓯ H/V DELAY selector
Depress this button to observe the horizontal and vertical sync signals at the same time. The horizontal sync signal is displayed in the left quarter of the screen; the vertical sync signal is displayed near the center of the screen.

⓰ 16:9 selector
Press this selector to monitor the signals of 16:9 picture.
Pressing the UNDER SCAN selector ⓮ in 16:9 mode displays the whole 16:9 picture up to the four corners.

⓱ R/G/B BIAS and GAIN adjustment controls
Used for white balance fine adjustment.
BIAS and GAIN controls are provided for the R (red), G (green) and B (blue) screens.
BIAS: Adjust the white balance and brightness of the screen at the lowlight.
GAIN: Adjust the white balance and brightness of the screen at the highlight.

Rear



⓲ LINE A connectors (PVM-9045QM/9042QM)
⓲ LINE connectors (PVM-9040ME)

Y/C IN (4-pin mini DIN): Connect to the Y/C separate output of a video camera, VCR or other video equipment.

Y/C OUT (4-pin mini DIN): Loop-through output of the Y/C IN connector. Connect to the Y/C separate input of a VCR or another monitor.

VIDEO IN (BNC): Connect to the video output of a video camera, VCR or other video equipment.

VIDEO OUT (BNC): Loop-through output of the VIDEO IN connector. Connect to the video input of a VCR or another monitor.

AUDIO IN (phono jack): Connect to the audio output of a VCR or a microphone (through a suitable microphone amplifier).

AUDIO OUT (phono jack): Loop-through output of the AUDIO IN connector. Connect to the audio input of a VCR or another monitor.

Note

The Y/C IN connector has a priority over the VIDEO IN connector.
When a plug is connected to the Y/C IN connector, the VIDEO IN connector is automatically disconnected.

Note

(PVM-9045QM/9042QM only)
To monitor the signal fed through these connectors, keep the LINE/RGB selector and the A/B, RGB/Y R-Y B-Y selector on the front panel released (LINE and A).

⓳ LINE B connectors

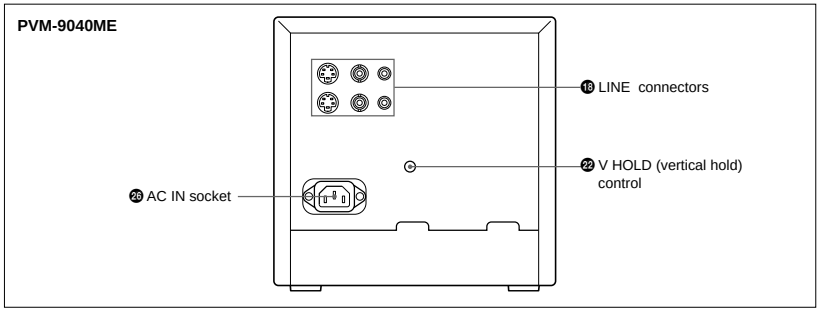
To monitor the signal fed through these connectors, keep the LINE/RGB selector released (LINE) and depress the A/B, RGB/Y R-Y B-Y selector on the front panel (B).

VIDEO IN (BNC): Connect to the video output of a video camera, VCR or other video equipment.

VIDEO OUT (BNC): Loop-through output of the VIDEO IN connector. Connect to the video input of a VCR or another monitor.

AUDIO IN (phono jack): Connect to the audio output of a VCR or a microphone (through a suitable microphone amplifier).

AUDIO OUT (phono jack): Loop-through output of the AUDIO IN connector. Connect to the audio input of a VCR or another monitor.



⓴ REMOTE connector (8-pin mini DIN)

Connect to the tally output of a control console, special-effect generator, etc. The tally lamp on the front panel will be turned on and off by the connected equipment. This connector can be used for connecting a remote controller.
For the pin assignment of this connector, see "Specifications" on page 12 (GB).

㉑ EXT SYNC (external sync) connectors

IN (BNC): When this monitor operates on an external sync signal, connect the reference signal from a sync generator to this connector. In this case, depress the SYNC INT/EXT selector on the front panel (EXT).

OUT (BNC): Loop-through output of the EXT SYCN IN connector. Connect to the external sync input of video equipment to be synchronized with this monitor.

㉒ V HOLD (vertical hold) control

Turn to stabilize the picture if it rolls vertically.

㉓ DC 12V IN jack (XLR, 4 pin)

Connect the Sony battery adaptor DC-L10 (not supplied).

㉔ COMPONENT LEVEL selector

Select the component level from among two modes.
N10/SMPTE: for 100/0/100/0 signal
BETA 0: for 100/0/75/0 signal

㉕ RGB/COMPONENT input connectors

R/R-Y, G/Y, B/B-Y (BNC), AUDIO (phono):
To monitor a signal fed through these connectors, depress the LINE/RGB selector on the front panel (RGB). When the SYNC INT/EXT selector on the front paner is released (INT), the monitor operates on the sync signal from the G/Y channel.

To monitor the analog RGB signal

Connect to the analog RGB signal outputs of a video camera. Keep the A/B, RGB/Y R-Y B-Y selector on the front panel released (RGB).

To monitor the component signal

Connect to the R-Y/Y/B-Y componenet signal outputs of a Sony BetaCam video camera. Depress the A/B, RGB/Y R-Y B-Y selector on the front panel (Y R-Y B-Y).

㉖ AC IN socket

Connect the supplied AC power cord to this socket and to a wall outlet.

㉗ EJECT buttons

Press the EJECT button upwards to remove the battery pack.

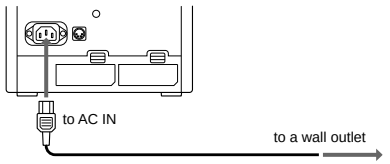
㉘ BATTERY compartments

Insert the NP-1B battery pack (not supplied).

Power Sources

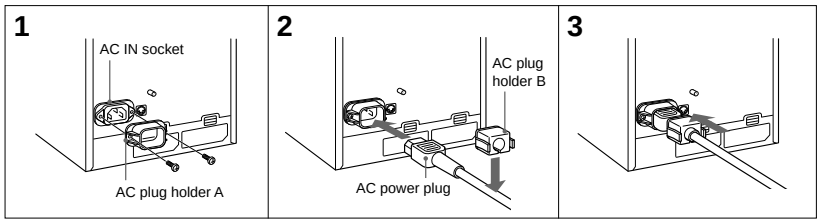
House Current (for all models)

Connect the supplied AC power cord to the AC IN socket and to a wall outlet.



For the PVM-9045QM/9042QM
When the AC power cord is plugged into the AC IN socket, the battery pack (if installed) or the DC 12 V IN jack (if connected) is automatically disconnected.

To connect an AC power cord securely with AC plug holders.



1 Remove the AC IN socket screws and then use them to attach the AC plug holder A (supplied) to the AC IN socket.

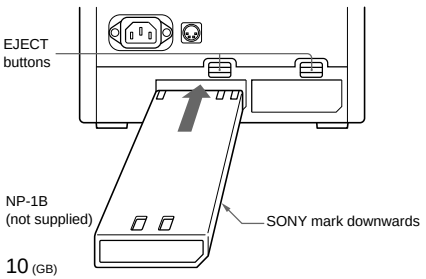
2 Plug the power cord to the AC IN sokcet. Then, attach the supplied AC plug holder B on top of the AC power cord.

3 Slide AC plug holder B over the cord until is locks.

To remove the AC power cord
Pull out AC plug holder B by squeezing the left and right sides.

Rechargeable Battery (PVM-9045QM/9042QM only)

The monitor can operate with one or two battery packs. For extended use, two battery packs are recommended.



To remove the battery pack, press the EJECT button upwards.

For charging, use the BC-1WDCE for the NP-1B.

Note
Make sure you disconnect the cables connected to the connectors (AC IN, DC 12 V IN) at the rear of the monitor. Otherwise, the monitor cannot operate on the battery pack(s).

Specifications

Video signal

Colour system	PVM-9045QM/9042QM: PAL, SECAM, NTSC, NTSC4.43 PVM-9040ME: PAL, SECAM
Resolution	PVM-9045QM: 450 TV lines PVM-9042QM/9040ME: 250 TV lines
Aperture correction	–4.0 dB to +6.0 dB (at 3.0 MHz)
Frequency response	6.0 MHz (–3.0 dB)
Synchronization	AFC time constant 1.0 msec.

Picture performance

Normal scan	6% over scan of CRT effective screen area
Underscan	3% underscan of CRT effective screen area
H. linearity	Less than 5.0% (typical)
V. linearity	Less than 5.0% (typical)
Convergence	Central area: 0.43 mm (typical) Peripheral area: 0.53 mm (typical)
Raster size stability	H: 1.0%, V: 1.5%
High voltage regulation	3.0%
Colour temperature	D65

Inputs and Outputs

Connector \ Model		PVM-9045QM PVM-9042QM	PVM-9040ME
LINE A	Y/C IN	yes	yes
	Y/C OUT	yes	yes
	VIDEO IN	yes	yes
	VIDEO OUT	yes	yes
	AUDIO IN	yes	yes
	AUDIO OUT	yes	yes
LINE B	VIDEO IN	yes	no
	VIDEO OUT	yes	no
	AUDIO IN	yes	no
	AUDIO OUT	yes	no
RGB/ COMPONENT	R/R-Y IN	yes	no
	G/Y IN	yes	no
	B/B-Y IN	yes	no
	AUDIO IN	yes	no
EXT SYNC	IN	yes	no
	OUT	yes	no
REMOTE		yes	no

Inputs	Y/C IN: 4-pin mini DIN connector *See the pin assignment on page 12 (GB).* VIDEO IN: BNC connector 1 Vp-p ± 6 dB, sync negative AUDIO IN: phono jack, –5 dBu[a], less than 47 kohms R/R-Y, G/Y, B/B-Y: BNC connector R, G, B channels: 0.7 Vp-p, ± 6 dB Sync on green: 0.3 Vp-p, negative R-Y, Y, B-Y channels: 0.7 Vp-p, ±6 dB (Standard colour bar signal of 100% chrominance) EXT SYNC IN: BNC connector Composite sync 4 Vp-p, ±6 dB, negative
Loop-through outputs	Y/C OUT: 4-pin mini DIN connector, 75 ohms terminated (75 ohms automatic termination) VIDEO OUT: BNC connector, 75 ohms terminated (75 ohms automatic termination) AUDIO OUT: phono jack EXT SYNC OUT: BNC connector, 75 ohms terminated
Speaker output	Output level: 0.5W
Remote input	REMOTE: 8-pin mini DIN connctor (75 ohms automatic termination) *See the pin assignment on page 12 (GB).*

a) 0 dBu = 0.775 Vr.m.s.

General

Power consumption & requirements	PVM-9045QM/9042QM: 0.7 to 0.4A 43W at 100 to 240V AC operation 3.7A 40W at 12 V DC operation PVM-9040ME: 0.7 to 0.4A 39W at 100 to 240V AC operation
Operating conditions	
Temperature	0 to +35°C (32 to 95°F)
Humidity	0 to 90% (no condensation)
Pressure	700 to 1060 hPa

Specifications

Transport and storage conditions
- Temperature: –10 to +40°C (14 to 104°F)
- Humidity: 0 to 90%
- Pressure: 700 to 1060 hPa

Dimensions: Approx. 217 x 217 x 352.5 mm (w/h/d) (8 5/8 × 8 5/8 × 14 inches) not incl. projecting parts and controls

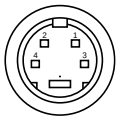
Mass: Approx. 8.2 kg (18 lb 1 oz) not incl. battery packs

Accessory supplied:
- AC power cord (1)
- Cable with an 8-pin connector (1) (PVM-9045QM/9042QM only)
- AC plug holders (1 set)
- Tally plate (1) (PVM-9045QM/9042QM only)

Design and specifications are subject to change without notice.

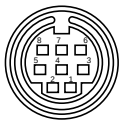
Pin Assignment

Y/C IN connector (4-pin mini DIN)



Pin No.	Signal	Description
1	Y-input	1 Vp-p, sync negative, 75 ohms
2	CHROMA sub-carrier-input	300 mVp-p (PAL), burst Delay time between Y and C: within 0 ±100 nsec., 75 ohms
3	GND for Y-input	GND
4	GND for CHROMA-input	GND

REMOTE connector (8-pin mini DIN)
(PVM-9045QM/9042QM only)



Pin No.	Signal
1	16:9
2	H/V delay
3	GND
4	EXT SYNC
5	Tally
6	Underscan
7	A/B or RGB/Y R-Y B-Y
8	LINE/RGB

Notes
- For remote control, connect the pin of the desired function to pin 3 (GND).
- For remote control, set the front button to OFF (the switch is out).

SONY

3-865-341-**11** (1)

Trinitron®
Color Video Monitor

Operating Instructions

US

Trinitron

PVM-9045PM

English

WARNING

To prevent fire or shock hazard, do not expose the unit to rain or moisture.

Dangerously high voltages are present inside the unit. Do not open the cabinet. Refer servicing to qualified personnel only.

THIS APPARATUS MUST BE EARTHED

This symbol is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

This symbol is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

For the customers in the USA

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.

You are cautioned that any changes or modifications not expressly approved in this manual could void your authority to operate this equipment.

In the event of a malfunction or when maintenance is necessary, consult an authorized Sony dealer.

Ensure that your equipment is connected correctly.
If you are in any doubt consult a qualified electrician.

CAUTION:

Danger of explosion if battery is incorrectly replaced. Replace only with the same or equivalent type recommended by the manufacturer. Discard used batteries according to the manufacturer's instructions.

Precautions

On safety

- **PVM-9045PM:** Operate the unit on 120 V AC or 12 V DC. For the AC operation, use only the supplied AC power cord or the AC power adaptor recommended (not supplied). Do not use any other type.
  For the battery operation, use only the NP-1B battery pack and BP-L60A/L90A with DC-L10 (not supplied). Do not use any other batteries.
- Should any liquid or solid object fall into the cabinet, unplug the unit and have it checked by qualified personnel before operating it further.
- Unplug the unit from the wall outlet if it is not to be used for several days.
- To disconnect the AC power cord, pull it out by the plug. Never pull the cord itself.

On installation

- Allow adequate air circulation to prevent internal heat build-up. Do not place the unit on surfaces (rugs, blankets, etc.) or near materials (curtains, draperies) that may block the ventilation holes.
- Do not install the unit near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, excessive dust, mechanical vibration or shock.
- Keep the unit away from a loudspeaker or motor, as the picture may be affected.

On cleaning

Clean the unit with a slightly dampened soft cloth. Use a mild household detergent. Never use strong solvents such as thinner or benzine as they might damage the finish of the cabinet.
As a safety precaution, unplug the unit before cleaning it.

On repacking

Retain the original carton and packing materials for safe transport of this unit in the future.

If you have any questions about this unit, contact your authorized Sony dealer.

ATTENTION – When the product is installed in a rack:

a) Elevated operating ambient temperature
If installed in a closed or multi-unit rack assembly, the operating ambient temperature of the rack environment may be greater than room ambient. Therefore, consideration should be given to installing the equipment in an environment compatible with the manufacturer's maximum rated ambient temperature of 0 to +35°C (32 to 95°F) (Tmra).

b) Reduced air flow
Installation of the equipment in a rack should be such that the amount of air flow required for safe operation of the equipment is not compromised.

c) Mechanical loading
Mounting of the equipment in the rack should be such that a hazardous condition is not achieved due to uneven mechanical loading.

d) Circuit overloading
Consideration should be given to the connection of the equipment to the supply circuit and the effect that overloading of circuits might have on overcurrent protection and supply wiring. Appropriate consideration of equipment nameplate ratings should be used when addressing this concern.

e) Reliable earthing
Reliable earthing of rack-mounted equipment should be maintained. Particular attention should be given to supply connections other than direct connections to the branch circuit (e.g., use of power strips).

Table of Contents

Features

PAL-M and NTSC color systems available
The monitor can display PAL-M, NTSC signals. The appropriate color system is selected automatically.

HR (High Resolution) Trinitron® [1] picture tube
The HR Trinitron picture tube (0.25 mm aperture grill pitch) provides a high resolution picture. Horizontal resolution is more than 450 TV lines at the center of the picture.

Beam current feedback circuit
The built-in beam current feedback circuit assures stable white balance.

Comb filter
When NTSC video signals are received, a comb filter activates to increase the resolution, resulting fine picture detail without color spill or color noise.

Multiple input signals
In addition to the composite video signals and the Y/C signals, analog RGB signals and component signals can be input.

External sync input
When the EXT SYNC button is pressed, the monitor can be operated on the sync signal fed through an external sync connector.

Blue only picture
Black and white apparent picture consisting from only the blue signal will be displayed. This facilitates the “chroma” and “phase” adjustment, and the observation of the video noise.

16:9 selector
The monitor can display the 16:9 signal with the correct ratio of width and height, compressing the picture vertically.

Under scan mode
The monitor can display signals that are scanned outside the normal screen so you can monitor the whole image.

Audio circuit and built-in speaker
A speaker (0.5 W, monaural) is built into the monitor for sound monitoring.

Automatic/Manual DEGAUSS
The screen is automatically demagnetized when the monitor is turned on. Manual degauss is also available by pressing the DEGAUSS button.

Automatic termination
(only connectors marked ⊣⋀⊢)
The Y/C, VIDEO IN and EXT SYNC IN connectors are terminated at 75 ohms inside, when no cable is connected to the loop-through output connectors. When a cable is connected to an output connector, the 75-ohm termination is automatically released.

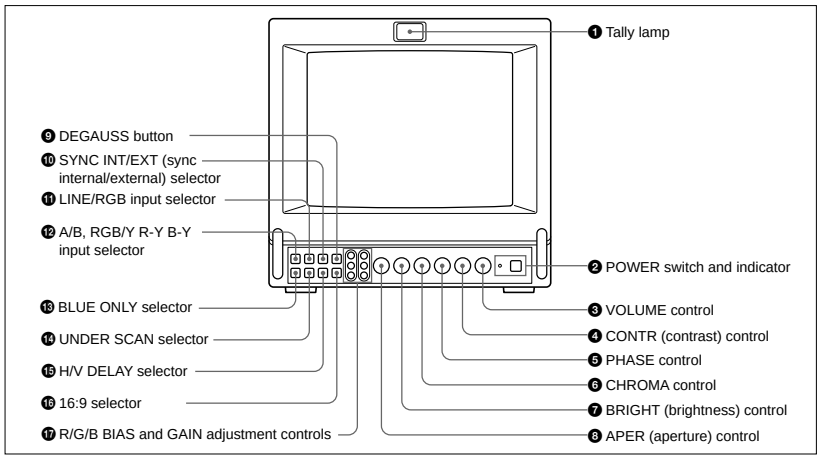
EIA standard 19-inch rack mounting
By using an MB-507 mounting bracket (not supplied), the monitor can be mounted in an EIA standard 19-inch rack. For details on mounting, see the instruction manual of the MB-507.

Varied power sources
In addition to AC power, you can use battery pack or external DC 12 V power. The monitor can operate with one or two Sony NP-1B* battery packs. If you use the DC-L10* battery adaptor, the monitor can operate with a Sony BP-L60A/L90A* lithium ion battery pack.

* The NP-1B battery pack, DC-L10 battery adaptor and BP-L60A/L90A battery pack are not supplied.

Location and Function of Parts and Controls

Front



❶ Tally lamp
This indicator lights up. The tally control connection is needed.
For the pin assignment, see "Specificatons" on page 12 (US).

❷ POWER switch and indicator
Depress to turn the monitor on. The indicator will light up in green.
The POWER indicator also functions as the battery indicator. When the internal battery becomes weak or the power supplied through the DC 12 V IN jack decreases, the indicator flashes.

❸ VOLUME control
Turn this control clockwise or counterclockwise to obtain the desired volume.

❹ CONTR (contrast) control
Turn clockwise to make the contrast stronger and counterclockwise to make it weaker.

❺ PHASE control
This control is effective only for the NTSC and NTSC4.43 color systems. Turn clockwise to make the skin tones greenish and counterclockwise to make them purplish.

❻ CHROMA control
Turn clockwise to make the colour intensity stronger and counterclockwise to make it weaker.

❼ BRIGHT (brightness) control
Turn clockwise for more brightness and counterclockwise for less.

❽ APER (aperture) control
Turn clockwise for more sharpness and counterclockwise for less.

Notes
- The PHASE, CHROMA and APER control settings have no effect on an analog RGB signal.
- The PHASE control has no effect on component signals.
- The PHASE control setting is effective only for the NTSC system.

❾ DEGAUSS button
Press this button momentarily. The screen will be demagnetized.

Note
If you press the DEGAUSS button again too soon, the color shades may be uneven.

❿ SYNC INT/EXT (sync internal/external) selector
Keep this button released (INT) to operate the monitor on the sync signal from the displayed composite video signal.
Depress this button (EXT) to operate the monitor on an external sync signal fed through the EXT SYNC connector on the rear panel.

⓫ LINE/RGB input selector
Select the programme to be monitored. Keep this button released (LINE) for a signal fed through the LINE A or LINE B connectors. Depress this button (RGB) for a signal fed through the RGB connectors.

⓬ A/B, RGB/Y R-Y B-Y input selector
When the LINE/RGB input selector is set to LINE, keep this button released (A) for a signal fed through the LINE A connectors. Press this button (B) to monitor the signals from the LINE B connector.

When the LINE/RGB input selector is set to RGB, select the RGB signal or the component signal which is fed through the RGB input connectors. Keep this button released (RGB) for the RGB signal. Press this button (Y R-Y B-Y) to monitor the component signals.

⓭ BLUE ONLY selector
Depress this button to turn off the red and green signals. A blue signal is displayed as an apparent monochrome picture on the screen. This facilitates "chroma" and "phase" control adjustments and the observation of video noise.

Note
The PHASE control adjustments is effective only for the NTSC system.

⓮ UNDER SCAN selector
Depress this button for underscanning. The display size is reduced by approximately 3% so that four corners of the picture are visible.

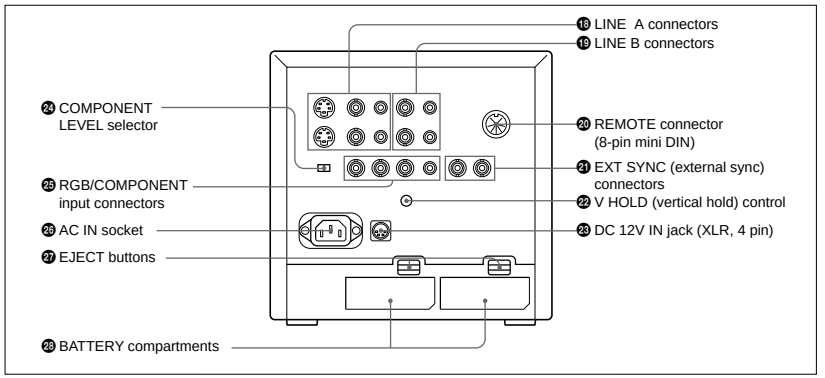
⓯ H/V DELAY selector
Depress this button to observe the horizontal and vertical sync signals at the same time. The horizontal sync signal is displayed in the left quarter of the screen; the vertical sync signal is displayed near the center of the screen.

⓰ 16:9 selector
Press this selector to monitor the signals of 16:9 picture.
Pressing the UNDER SCAN selector ⓮ in 16:9 mode displays the whole 16:9 picture up to the four corners.

⓱ R/G/B BIAS and GAIN adjustment controls
Used for white balance fine adjustment.
BIAS and GAIN controls are provided for the R (red), G (green) and B (blue) screens.
BIAS: Adjust the white balance and brightness of the screen at the lowlight.
GAIN: Adjust the white balance and brightness of the screen at the highlight.

Location and Function of Parts and Controls

Rear



⓲ LINE A connectors

Y/C IN (4-pin mini DIN): Connect to the Y/C separate output of a video camera, VCR or other video equipment.

Y/C OUT (4-pin mini DIN): Loop-through output of the Y/C IN connector. Connect to the Y/C separate input of a VCR or another monitor.

VIDEO IN (BNC): Connect to the video output of a video camera, VCR or other video equipment.

VIDEO OUT (BNC): Loop-through output of the VIDEO IN connector. Connect to the video input of a VCR or another monitor.

AUDIO IN (phono jack): Connect to the audio output of a VCR or a microphone (through a suitable microphone amplifier).

AUDIO OUT (phono jack): Loop-through output of the AUDIO IN connector. Connect to the audio input of a VCR or another monitor.

Note

The Y/C IN connector has a priority over the VIDEO IN connector.
When a plug is connected to the Y/C IN connector, the VIDEO IN connector is automatically disconnected.

To monitor the signal fed through these connectors, keep the LINE/RGB selector and the A/B, RGB/Y R-Y B-Y selector on the front panel released (LINE and A).

⓳ LINE B connectors

To monitor the signal fed through these connectors, keep the LINE/RGB selector released (LINE) and depress the A/B, RGB/Y R-Y B-Y selector on the front panel (B).

VIDEO IN (BNC): Connect to the video output of a video camera, VCR or other video equipment.

VIDEO OUT (BNC): Loop-through output of the VIDEO IN connector. Connect to the video input of a VCR or another monitor.

AUDIO IN (phono jack): Connect to the audio output of a VCR or a microphone (through a suitable microphone amplifier).

AUDIO OUT (phono jack): Loop-through output of the AUDIO IN connector. Connect to the audio input of a VCR or another monitor.

⓴ REMOTE connector (8-pin mini DIN)

Connect to the tally output of a control console, special-effect generator, etc. The tally lamp on the front panel will be turned on and off by the connected equipment. This connector can be used for connecting a remote controller.

For the pin assignment of this connector, see "Specifications" on page 12 (US).

㉑ EXT SYNC (external sync) connectors

IN (BNC): When this monitor operates on an external sync signal, connect the reference signal from a sync generator to this connector. In this case, depress the SYNC INT/EXT selector on the front panel (EXT).

OUT (BNC): Loop-through output of the EXT SYCN IN connector. Connect to the external sync input of video equipment to be synchronized with this monitor.

㉒ V HOLD (vertical hold) control

Turn to stabilize the picture if it rolls vertically.

㉓ DC 12V IN jack (XLR, 4 pin)

Connect the Sony battery adaptor DC-L10 (not supplied).

㉔ COMPONENT LEVEL selector

Select the component level from among two modes.
N10/SMPTE: for 100/0/100/0 signal
BETA 0: for 100/0/75/0 signal

㉕ RGB/COMPONENT input connectors

R/R-Y, G/Y, B/B-Y (BNC), AUDIO (phono):
To monitor a signal fed through these connectors, depress the LINE/RGB selector on the front panel (RGB). When the SYNC INT/EXT selector on the front paner is released (INT), the monitor operates on the sync signal from the G/Y channel.

To monitor the analog RGB signal

Connect to the analog RGB signal outputs of a video camera. Keep the A/B, RGB/Y R-Y B-Y selector on the front panel released (RGB).

To monitor the component signal

Connect to the R-Y/Y/B-Y componenet signal outputs of a Sony BetaCam video camera. Depress the A/B, RGB/Y R-Y B-Y selector on the front panel (Y R-Y B-Y).

㉖ AC IN socket

Connect the supplied AC power cord to this socket and to a wall outlet.

㉗ EJECT buttons

Press the EJECT button upwards to remove the battery pack.

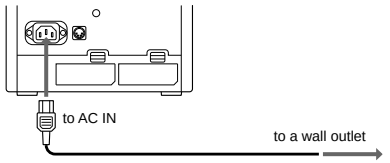
㉘ BATTERY compartments

Insert the NP-1B battery pack (not supplied).

Power Sources

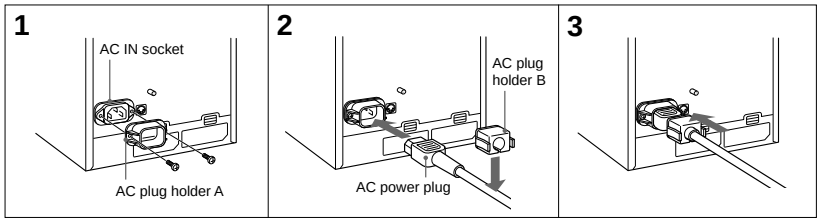
House Current (for all models)

Connect the supplied AC power cord to the AC IN socket and to a wall outlet.



When the AC power cord is plugged into the AC IN socket, the battery pack (if installed) or the AC power adaptor (if connected) is automatically disconnected.

To connect an AC power cord securely with AC plug holders.



1 Remove the AC IN socket screws and then use them to attach the AC plug holder A (supplied) to the AC IN socket.

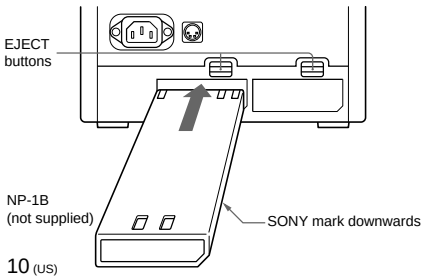
2 Plug the power cord to the AC IN sokcet. Then, attach the supplied AC plug holder B on top of the AC power cord.

3 Slide AC plug holder B over the cord until is locks.

To remove the AC power cord
Pull out AC plug holder B by squeezing the left and right sides.

Rechargeable Battery

The monitor can operate with one or two battery packs. For extended use, two battery packs are recommended.



To remove the battery pack, press the EJECT button upwards.

For charging, use the BC-1WD for the NP-1B.

Note
Make sure you disconnect the cables connected to the connectors (AC IN, DC 12 V IN) at the rear of the monitor. Otherwise, the monitor cannot operate on the battery pack(s).

Specifications

Video signal

Color system	PAL-M, NTSC
Resolution	450 TV lines
Aperture correction	–4.0 dB to +6.0 dB (at 3.0 MHz)
Frequency response	6.0 MHz (–3 dB) at all inputs
Synchronization	AFC time constant 1.0 msec.

Picture performance

Normal scan	6% over scan of CRT effective screen area
Underscan	3% underscan of CRT effective screen area
H. linearity	Less than 5.0% (typical)
V. linearity	Less than 5.0% (typical)
Convergence	Central area: 0.43 mm (typical) Peripheral area: 0.53 mm (typical)
Raster size stability	H: 1.0%, V: 1.5%
High voltage regulation	3.0%
Color temperature	D65

Inputs and Outputs

Inputs	Y/C IN: 4-pin mini DIN connector *See the pin assignment on page 12 (US).* VIDEO IN: BNC connector 1 Vp-p ± 6 dB, sync negative AUDIO IN: phono jack, –5 dBu[a)], less than 47 kohms R/R-Y, G/Y, B/B-Y: BNC connector R, G, B channels: 0.7 Vp-p, ± 6 dB Sync on green: 0.3 Vp-p, negative, R-Y, Y, B-Y channels: 0.7 Vp-p, ±6 dB (Standard colour bar signal of 75% chrominance) EXT SYNC IN: BNC connector Composite sync 4 Vp-p, ±6 dB, negative
Loop-through outputs	Y/C OUT: 4-pin mini DIN connector, 75 ohms terminated (75 ohms automatic termination) VIDEO OUT: BNC connector, 75 ohms terminated (75 ohms automatic termination) AUDIO OUT: phono jack EXT SYNC OUT: BNC connector, 75 ohms terminated
Speaker output	Output level 0.5 W
Remote input	REMOTE: 8-pin mini DIN connctor (75 ohms automatic termination) *See the pin assignment on page 12 (US).*

a) 0 dBu = 0.775 Vr.m.s.

General

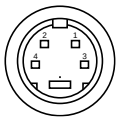
Power consumption & requirements	0.6 A 45 W MAX at 120 V AC operation 3.7 A 38 W at 12 V DC operation
Operating conditions	
Temperature	0 to +35°C (32 to 95°F)
Humidity	0 to 90% (no condensation)
Pressure	700 to 1060 hPa
Transport and storage conditions	
Temperature	–10 to +40°C (14 to 104°F)
Humidity	0 to 90%
Pressure	700 to 1060 hPa
Dimensions	Approx. 217 x 217 x 352.5 mm (w/h/d) (8 5/8 × 8 5/8 × 14 inches) not incl. projecting parts and controls
Mass	Approx. 8.2 kg (18 lb 1 oz) not incl. battery packs
Accessory supplied	AC power cord (1) Cable with an 8-pin connector (1) AC plug holders (1 set) Tally plate (1)

Design and specifications are subject to change without notice.

Specifications

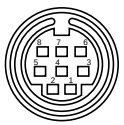
Pin Assignment

Y/C IN connector (4-pin mini DIN)



Pin No.	Signal	Description
1	Y-input	1 Vp-p, sync negative, 75 ohms
2	CHROMA sub-carrier-input	300 mVp-p (PAL-M), 286 mVp-p (NTSC), burst Delay time between Y and C: within 0 ±100 nsec., 75 ohms
3	GND for Y-input	GND
4	GND for CHROMA-input	GND

REMOTE connector (8-pin mini DIN)
(PVM-8045Q/8042Q only)



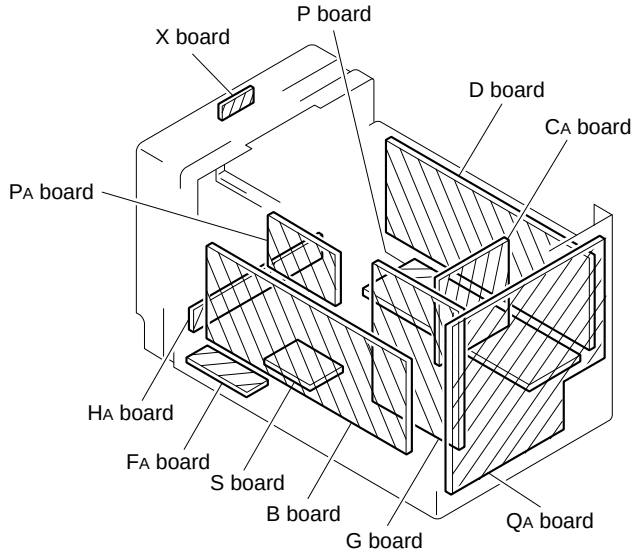
Pin No.	Signal
1	16:9
2	H/V delay
3	GND
4	EXT SYNC
5	Tally
6	Underscan
7	A/B or RGB/Y R-Y B-Y
8	LINE/RGB

Notes

- For remote control, connect the pin of the desired function to pin 3 (GND).
- For remote control, set the front button to OFF (the switch is out).

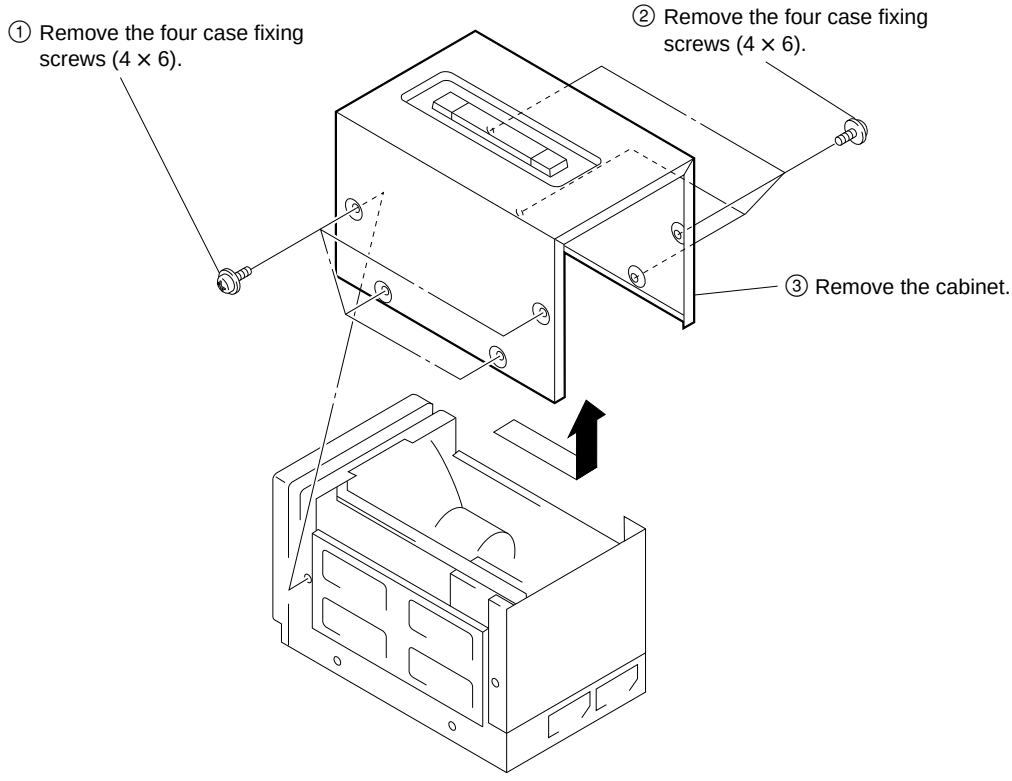
SECTION 2
SERVICE INFORMATION

2-1. CIRCUIT BOARDS LOCATION

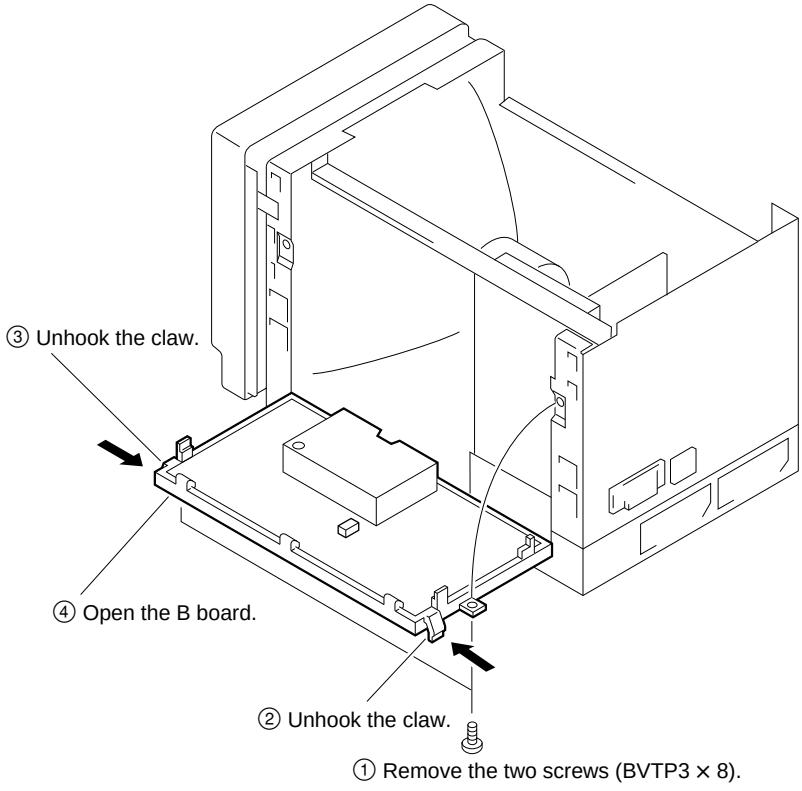


2-2. DISASSEMBLY

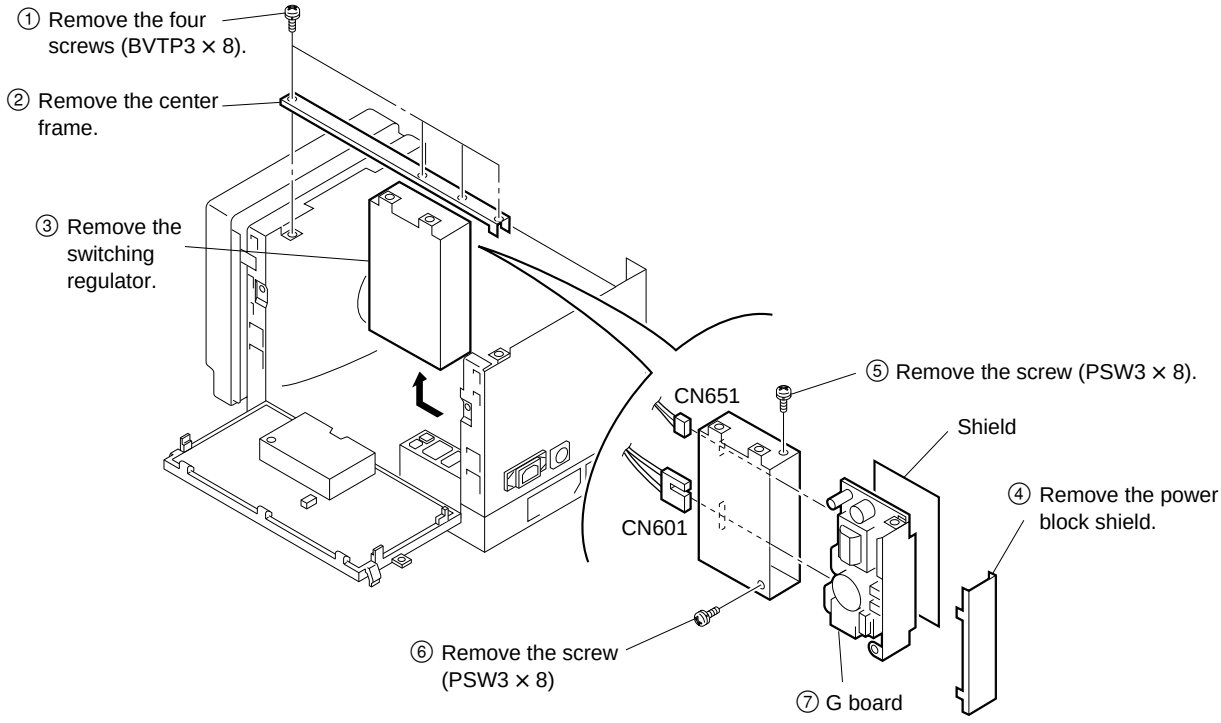
2-2-1. Cabinet Removal



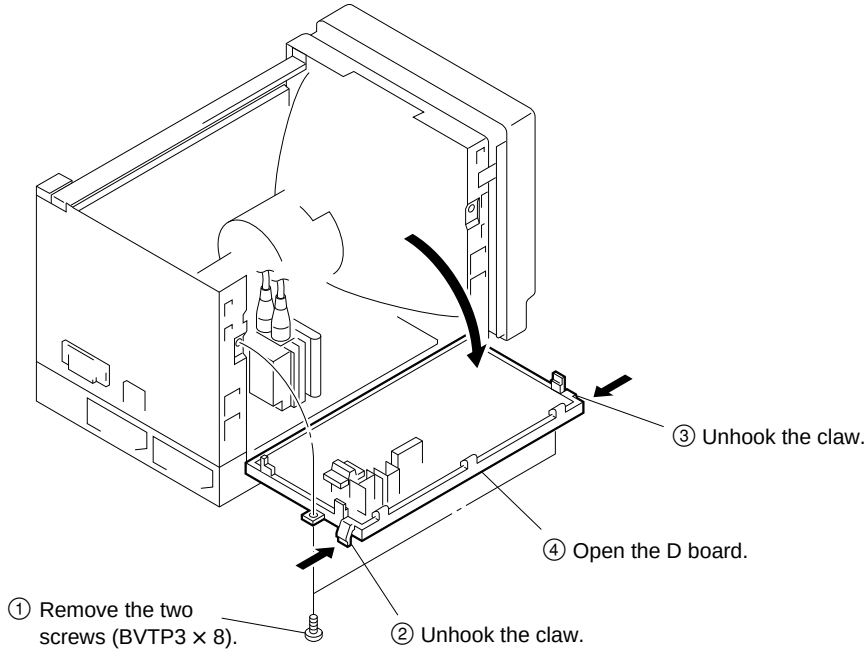
2-2-2. B Board Removal



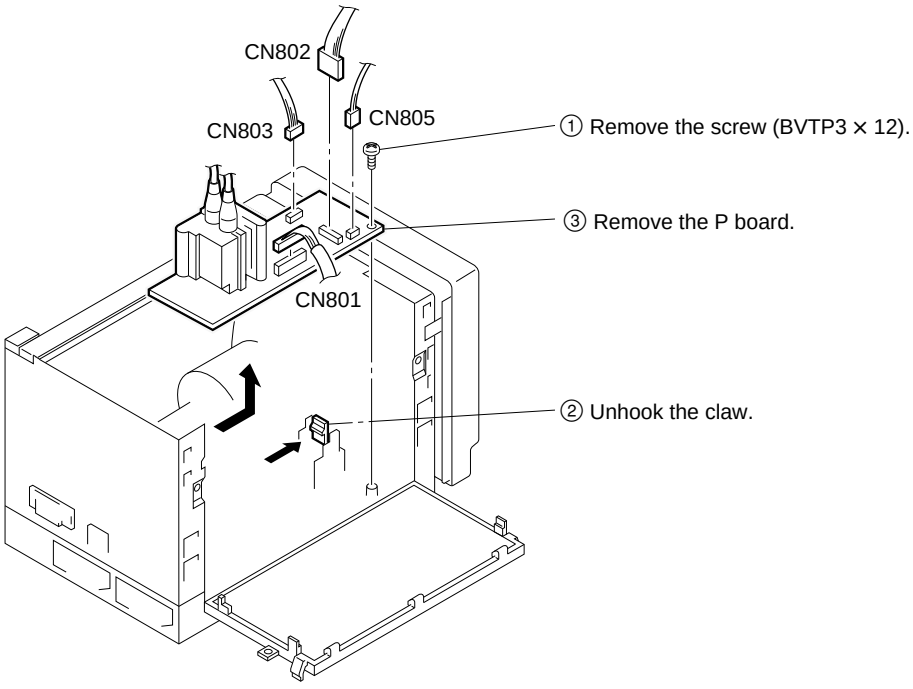
2-2-3. Switching Regulator Removal



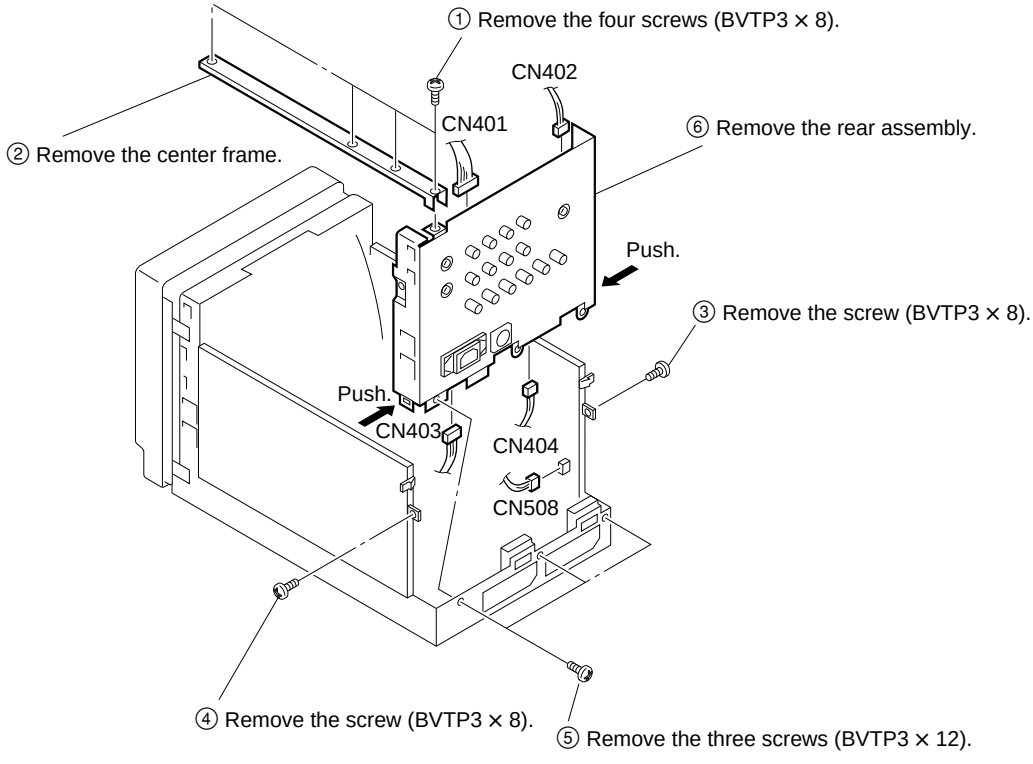
2-2-4. D Board Removal



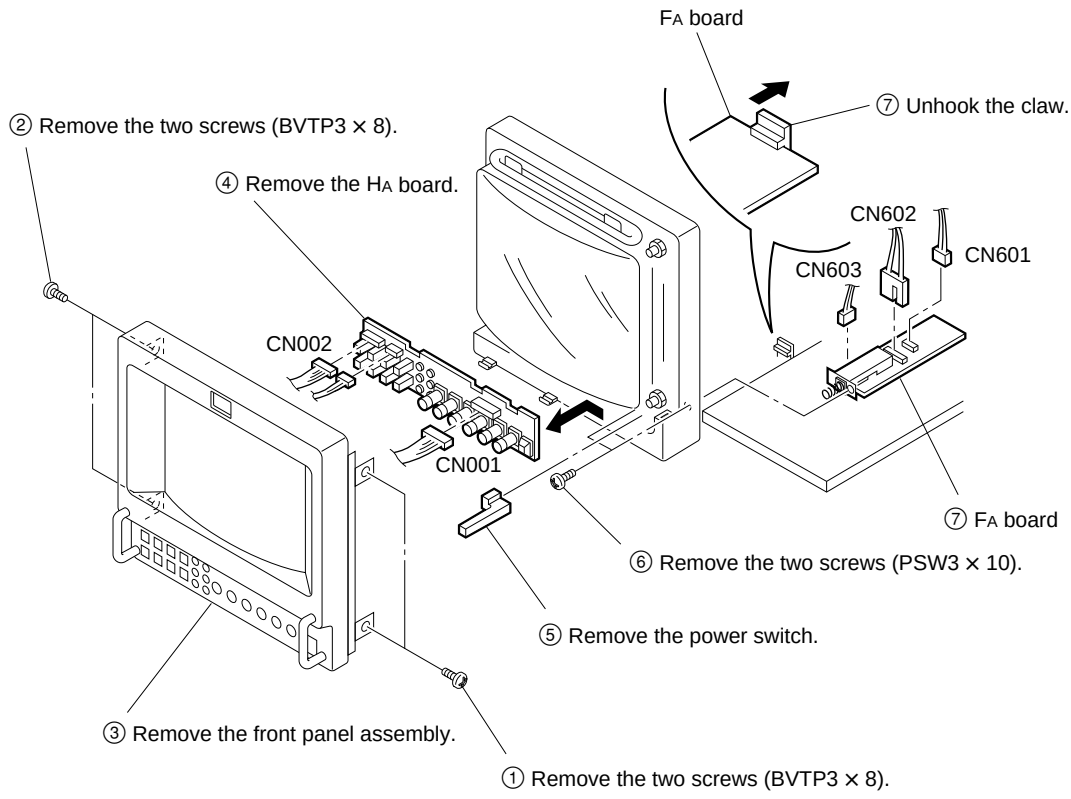
2-2-5. P Board Removal



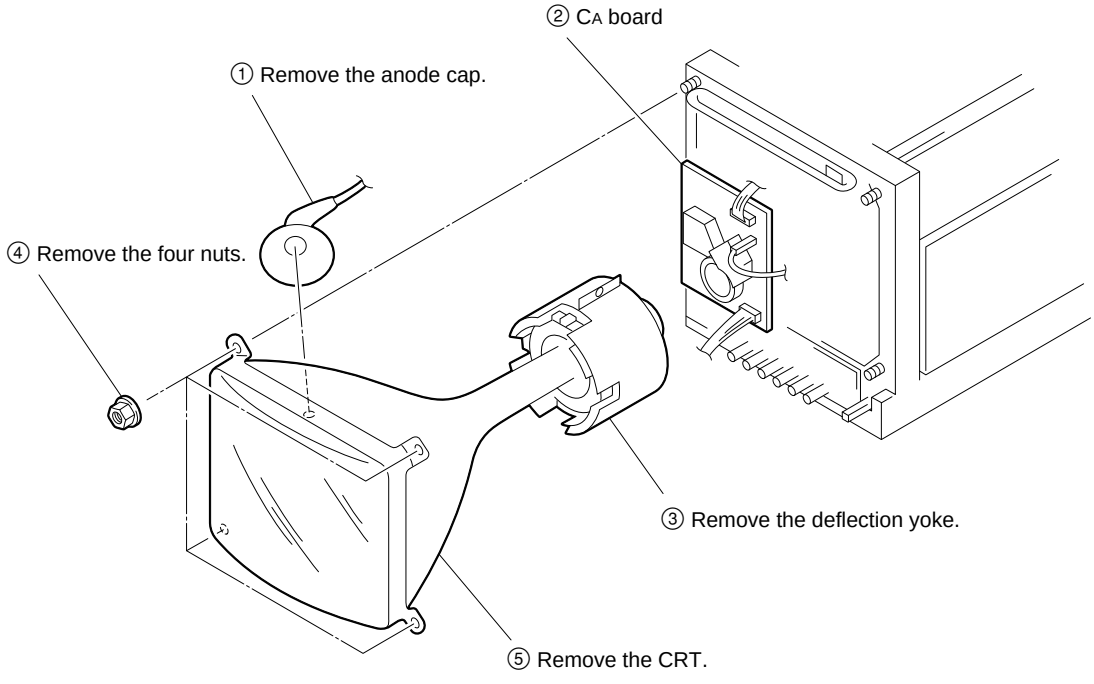
2-2-6. Rear Assembly Removal



2-2-7. HA Board Removal



2-2-8. CRT Removal

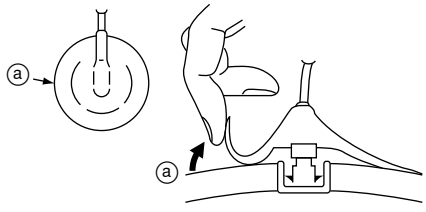


2-2-9. Removal of Anode-cap

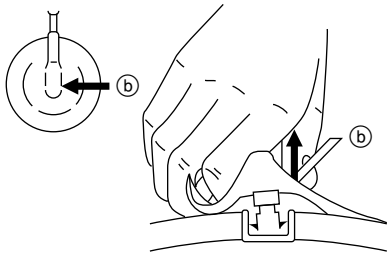
Note: Short circuit the anode of the picture tube and the anode cap to the metal chassis, picture tube shield or carbon painted on the picture tube, after removing the anode.

1. Removing Procedures

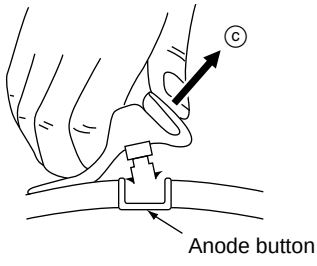
(1) Turn up one side of the rubber cap in the direction indicated by the arrow ⓐ.



(2) Using a thumb pull up the rubber cap firmly in the direction indicated by the arrow ⓑ.



(3) When one side of the rubber cap is separated from the anode button, the anode-cap can be removed by turning up the rubber cap and pulling up it in the direction of the arrow ⓒ.

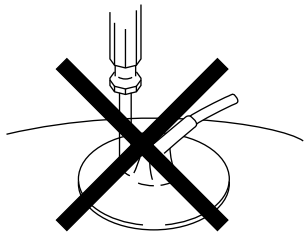


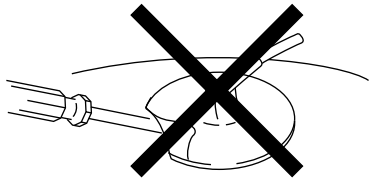
2. Handling Precautions

(1) Don't hurt the surface of anode-caps with sharp shaped material!

(2) Don't press the rubber hardly not to hurt inside of anode-caps!
A material fitting called as shatter-hook terminal is built in the rubber.

(3) Don't turn the foot of rubber over hardly!
The shatter-hook termianl will stick out or hurt the rubber.





2-2-10. Equipment Required

- Oscilloscope — Tektronix 2465 or equivalent (band width: 350 MHz or more)
- NTSC, PAL, PAL-M, SECAM component signal generator
  Tektronix TG2000 + AVG1 (optional module) + AWVG1 (optional module) or equivalent
- Monoscope signal generator — Shibasoku TP22AX or equivalent
- Frequency counter — Advantest TR5821AK or equivalent
- Digital voltmeter — Advantest TR6845 or equivalent
- Variable step-up transformer
  (or NF power supply)
- High-tension meter
- Regulated DC power supply
- Ammeter
- Luminance meter

SECTION 3
SET-UP ADJUSTMENTS

3-1. PREPARATIONS

The following adjustments should be made when a complete realignment is required or a new picture tube is installed. These adjustments should be performed with rated power supply voltage unless otherwise noted.

The controls and selectors below should be set as follows unless otherwise noted.

Front Panel Controls

VOLUME control ..... 50 %
CONTR control ..... 80 %
PHASE control ..... 50 % (center click)
CHROMA control ..... 50 % (center click)
BRIGHT control ..... 50 % (center click)
APER control ..... 50 % (center click)

Front Panel Selectors

SYNC INT/EXT selector ..... Pull (INT)
LINE/RGB selector ..... Pull (LINE)
A/B, RGB/Y R-Y B-Y selector ..... Pull (RGB)
BLUE ONLY selector ..... Pull (OFF)
UNDER SCAN selector ..... Pull (OFF)
H/V DELAY selector ..... Pull (OFF)
16 : 9 selector ..... Pull (4 : 3)

Rear Panel Control

V HOLD control ..... Stable position

Perform the adjustment in order as follows:

3-2. Landing Adjustment
3-3. Convergence Adjustment
3-4. Focus Adjustment
3-5. White Balance Adjustment

3-2. LANDING ADJUSTMENT

3-2-1. Preparations

1. To reduce geomagnetism effects, face the CRT screen to the east or west.
2. Turn on the power switch, and erase the magnetic force using a degausser.

3-2-2. Landing Adjustment

1. Receive the white signal, and set the CONTR and BRIGHT controls as follows:
   CONTR: MAXIMUM
   BRIGHT: set easy to observe
2. Adjust the white balance, screen (G2) voltage, and convergence roughly.
3. Loosen the deflection yoke mounting screw, and set the purity control to the center as shown in Fig. 3-1.
4. Set the test signal generator to green.
5. Move the deflection yoke backward, and adjust the purity control so that the green is in the center and blue and red are at the sides, evenly. (See Fig. 3-2.)
6. Move the deflection yoke forward, and adjust so that the entire screen becomes green.
   (Repeat steps 4 to 7 as to red and blue.)
7. When the landing at the corners is not right, correct by using the magnet. (See Fig. 3-3.)
   Note: When correction magnet is used, be sure to degauss the unit.
8. When the position of the deflection yoke is determined, tighten it with a deflection yoke mounting screw.

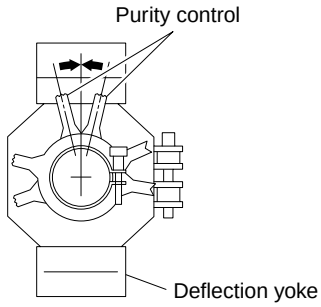


Fig. 3-1

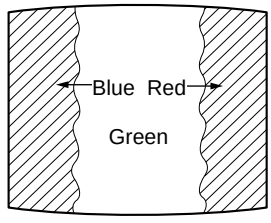


Fig. 3-2

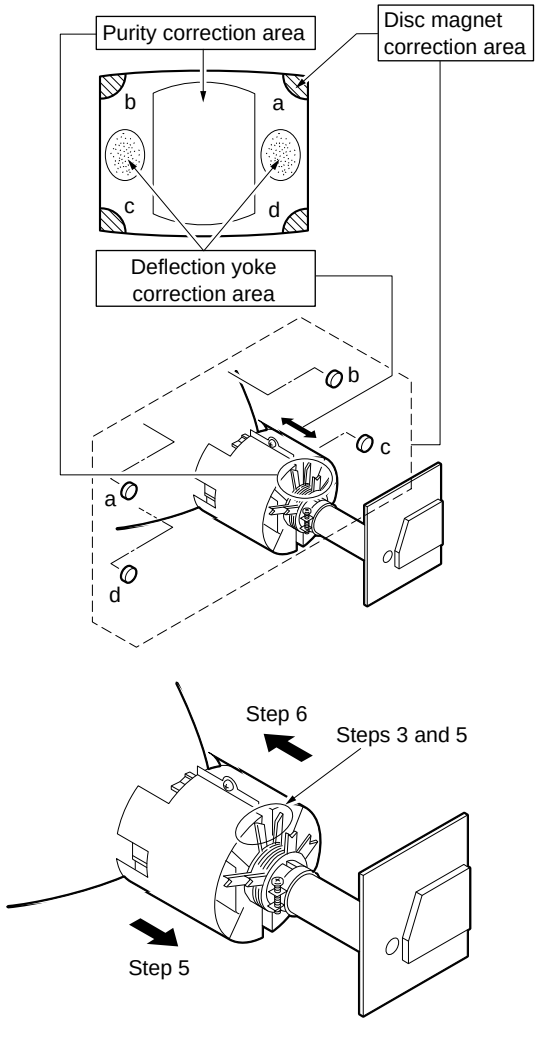


Fig. 3-3

3-3. CONVERGENCE ADJUSTMENT

3-3-1. Horizontal and Vertical Convergence Adjustment on the Center of Screen

1. Before starting the fine adjustment, perform V.SIZE, V.CENT, H.SIZE, H.CENT and screen distortion adjustments roughly.
2. Receive a dot signal, and set the BRIGHT control to minimum and CONTR control to normal.
3. Adjust RV701 (H.STAT) on the CA board to coincide rhe Red, Green, and Blue dots on the center of screen (horizontal movement).
4. Adjust V.STAT magnet to coincide the Red, Green, and Blue dots on the center of screen (vertical movement).

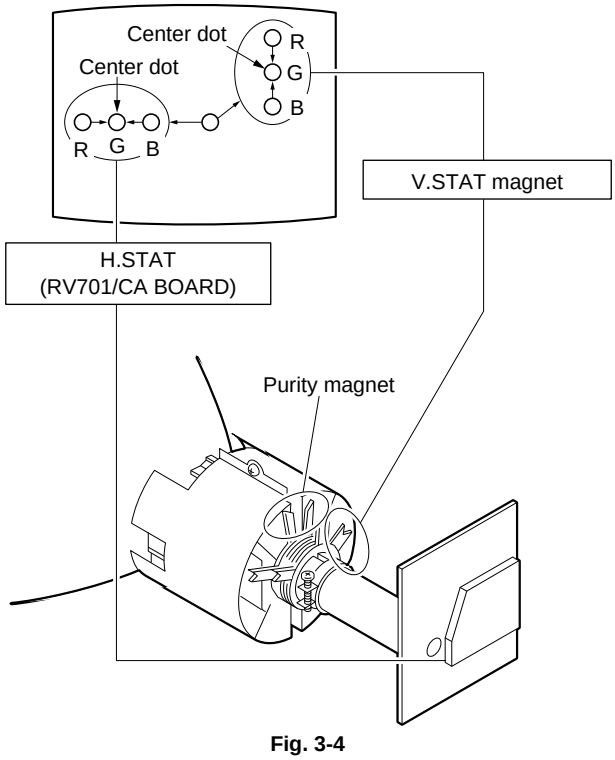


Fig. 3-4

Note: If Red, Green, and Blue dots do not coincide on the center of screen with RV701 (H.STAT) on the CA board, perform adjustment using V.STAT magnet at the same time while tracking.
Tilt the V.STAT magnet and adjust static convergence to open or close the V.STAT magnet.

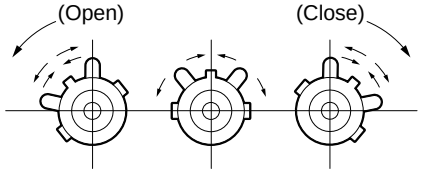


Fig. 3-5

5. The movement of Red, Green, and Blue dots by means of tilting, opening, and closing of the vertical static convergence magnet are as follows:
   ① When opening or closing the V.STAT magnet:

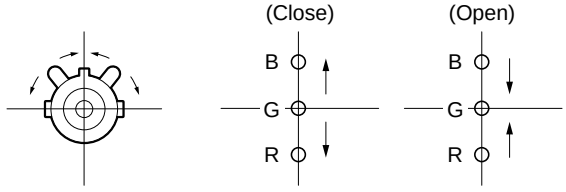


Fig. 3-6

   ② When tilting the V.STAT magnet counterclockwise:

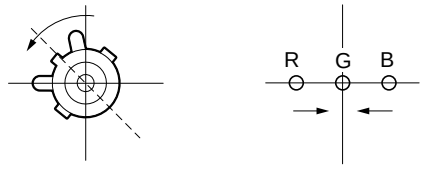


Fig. 3-7

   ③ When tilting the V.STAT magnet clockwise:

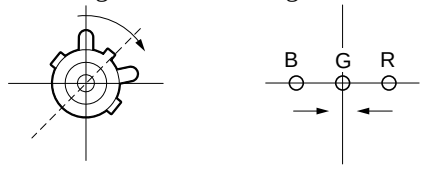


Fig. 3-8

   ④ When tilting the V.STAT magnet then open or close it:

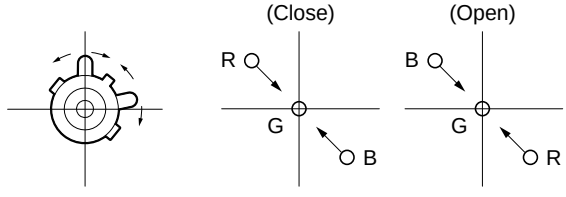


Fig. 3-9

Note: If Red and Green dots do not coincide with Blue dot, adjust with BMC (6-pole) magnet.

6. HMC/VMC correction with BMC (6-pole) magnet
   ① HMC (Horizontal Misconvergence) correction and motion of the electron beam with BMC (6-pole) magnet:

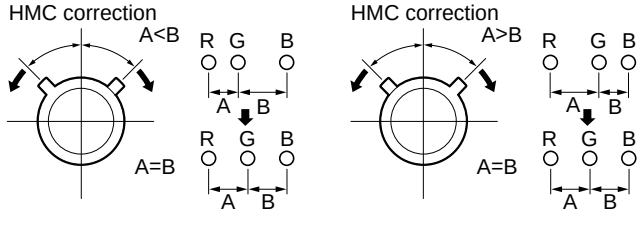
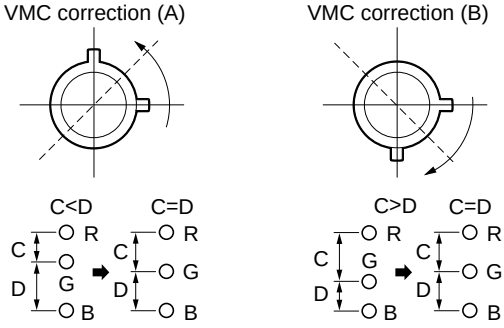


Fig. 3-10

② VMC (Vertical Misconvergence) correction and motion of the electron beam with BMC (6-pole) magnet:



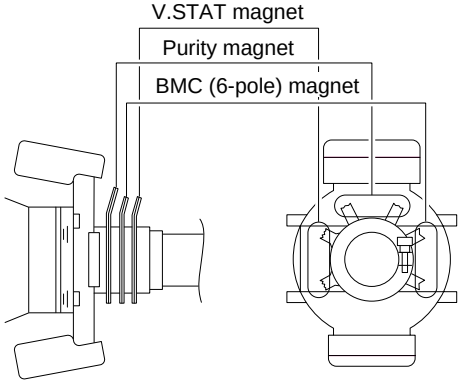
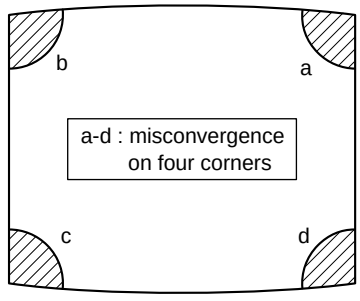


Fig. 3-11

3-3-2. Horizontal and Vertical Dynamic Convergence Adjustment in the Vicinity of Screen

1. When there is misconvergence at the sides of the screen, adjust the inclination of deflection yoke in accordance with the following steps.
2. Insert the three DY spacers between the deflection yoke and picture tube's funnel as shown in Fig. 3-12.
3. Adjust the convergence around the four corners with a permalloy.



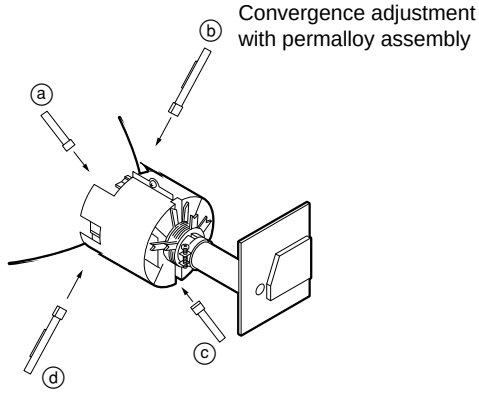


Fig. 3-13

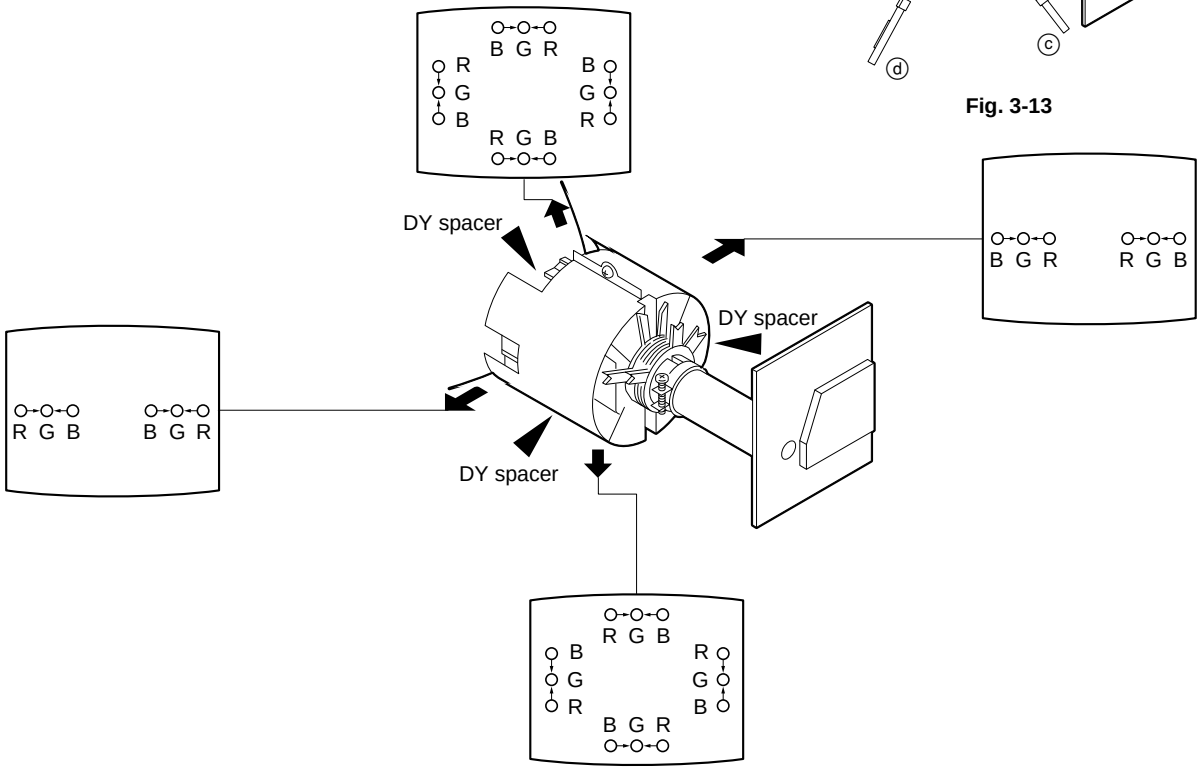


Fig. 3-12

3-4. FOCUS ADJUSTMENT

1. Receive the monoscope signal.
2. Set the CONTR control to normal.
3. Adjust the FOCUS control of the FBT so that the focus at the center of CRT screen and around the CRT screen become optimum.

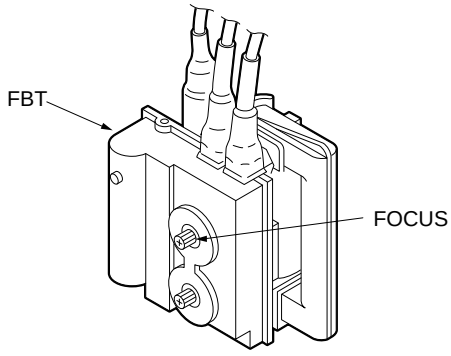


Fig. 3-14

3-5. WHITE BALANCE ADJUSTMENT

3-5-1. Screen Voltage Adjustment

1. Receive the dot signal.
2. Connect a digital voltmeter to pin 5 (KG) of CRT socket. Adjust RV119 (G C/O) on the B board so that the voltage is 103 Vdc.
3. Connect a digital voltmeter to pin 9 (KB) of CRT socket. Adjust RV121 (B C/O) on the B board so that the voltage is 103 Vdc.
4. Adjust the SCREEN control of the FBT to the position where just before the flyback line disappears from the CRT screen.

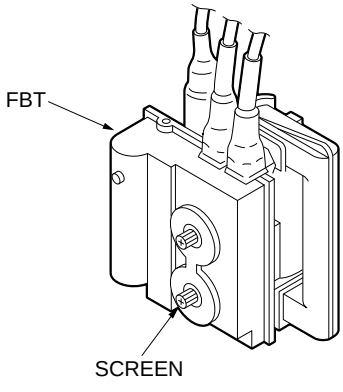


Fig. 3-15

3-5-2. White Balance Adjustment

1. Receive the color bars signal. (Set the BURST switch of the test signal generator to OFF.)
2. Set the following controls on the front panel as follows:
   BRIGHT ⇨ Center click
   CONTR ⇨ Minimum
   BIAS (Front panel) ⇨ 50 %
   GAIN (Front panel) ⇨ 50 %
3. Adjust RV118 (SUB BRT) on the B board so that the blue stripe portion on the color bars signal is bright dimly.

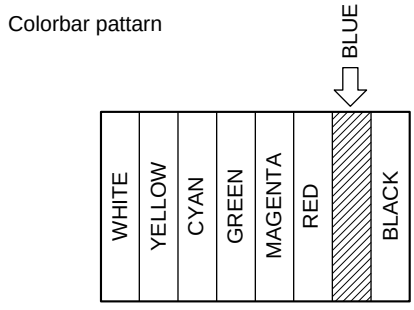


Fig. 3-16

4. Receive the white signal. (Set the BURST switch of the test signal generator to OFF.)
5. Set the CONTR control to 90 degrees clockwise from the center position.
6. Using the luminance meter, adjust the luminance level of the CRT screen so that it is 3 Nit. (Screen is bright dimly.)
7. Adjust the white balance of the cut-off with RV119 (G C/O) and RV121 (B C/O) on the B board.
8. Set the luminance level of white signal to 100 IRE with test signal generator.
9. Adjust the white balance of the high-light with RV120 (G GAIN) and RV122 (B GAIN) on the B board.
10. Press the BLUE ONLY switch on the front panel.
11. Adjust the white balance of the high-light with RV124 (R GAIN/BL) and RV125 (G GAIN/BL) on the B board.
12. Using the luminance meter, adjust the luminance level on the CRT screen with test signal generator so that it is 8 Nit. Then confirm that the white balance is adjusted correctly.

SECTION 4
SAFETY RELATED ADJUSTMENTS

Note: The "4-1. B+ Voltage Check" and "4-2. Protection Circuit (Hold-down circuit) Check" should always be performed when replacing the following components marked with ⋈ and ◪ on the schematic diagram.

D board

⋈ components RV833, RV1603

◪ components C519, C843, C844, C845, C846, C847, C848, C1601, C1602, D835, D836, D1601, D1603, IC502, Q833, Q834, Q835, Q836, Q1601, Q1602, Q1603, R523, R850, R851, R852, R853, R854, R855, R856, R857, R858, R859, R860, R861, R862, R863, R1601, R1602, R1603, R1604, R1605, R1606, R1607, R1608, R1628, R1629, R1630, RV833, RV1601, RV1603

G board

⋈ components RV651

◪ components C654, IC601, IC651, PH601, R653, R655, R656, R657, RV651

P board

◪ components ..... C814, NL801, T802 (FBT)

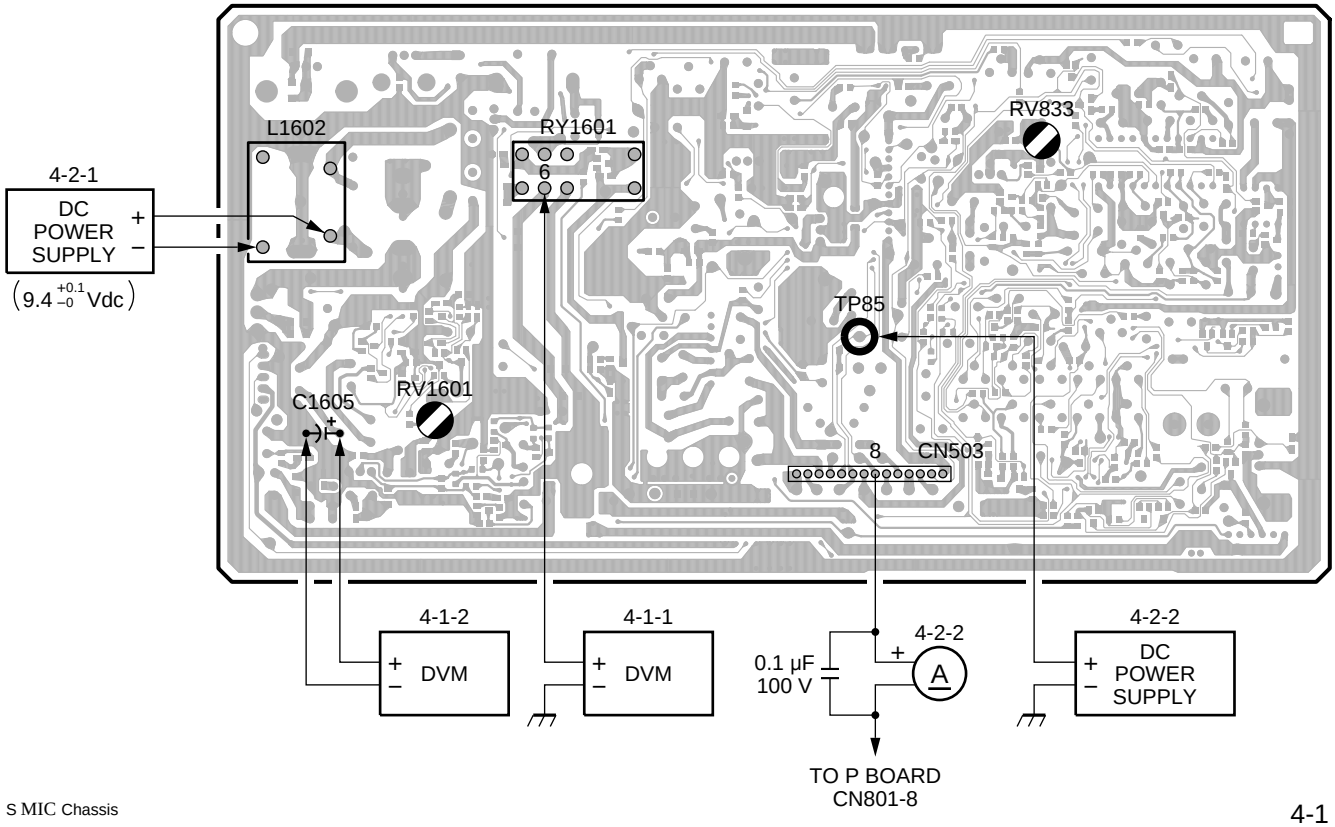
4-1. B+ VOLTAGE CHECK

4-1-1. B+ Voltage Check in AC Operation

Note: Be sure to use the NF power supply. If not, use an ordinary variable step-up transformer of its distortion factor is 3 % or less.

Input signal: Dot pattern signal
Controls: BRIGHT ⇨ Minimum
CONTR ⇨ Minimum

1. Input 130 $^{+5}_{-0}$ Vac from the NF power supply (or variable step-up transformer of its distortion factor is 3 % or less).
2. Connect the digital voltmeter to pin 6 of RY1601 and ground on the D board.
3. Make sure that the voltage is within the following specification.
   Specification:
   RY1601 Pin-6 (D board) = 41.9 Vdc or less
4. If the above voltage is out of specification, adjust voltage with RV651 on the G board. After adjusting, be sure to apply paint to RV651.



4-1-2. B+ Voltage Check in DC Operation

Input signal: Dot pattern signal
Controls: BRIGHT ⇨ Minimum
CONTR ⇨ Minimum

1. Input $12 \pm {}^{0.4}_{0}$ Vdc from the regulated DC power supply to DC 12V IN.
2. Connect the digital voltmeter to plus (+) terminal of C1605 and ground on the D board.
3. Make sure that the voltage is within the following specification.
   Specification:
   C1605 plus terminal (D board) = 40 ±0.1 Vdc or less
4. If the above voltage is out of specification, adjust voltage with RV1601 on the D board. After adjusting, be sure to apply paint to RV1601.

4-2. PROTECTION CIRCUIT (HOLD-DOWN CIRCUIT) CHECK

4-2-1. Shutdown Voltage Adjustment

Input signal: Dot pattern signal
Controls: BRIGHT ⇨ Minimum
CONTR ⇨ Minimum

1. Turn RV1602 on the D board and stops where the protection circuit doesn't shut down.
2. Apply voltage of $9.4 \pm {}^{0.1}_{0}$ Vdc from the DC power supply between pin 5 of L1602 and ground on the D board.
3. Turn on the power.
4. Gradually turn RV1602 on the D board and stops where the shutdown circuit works.

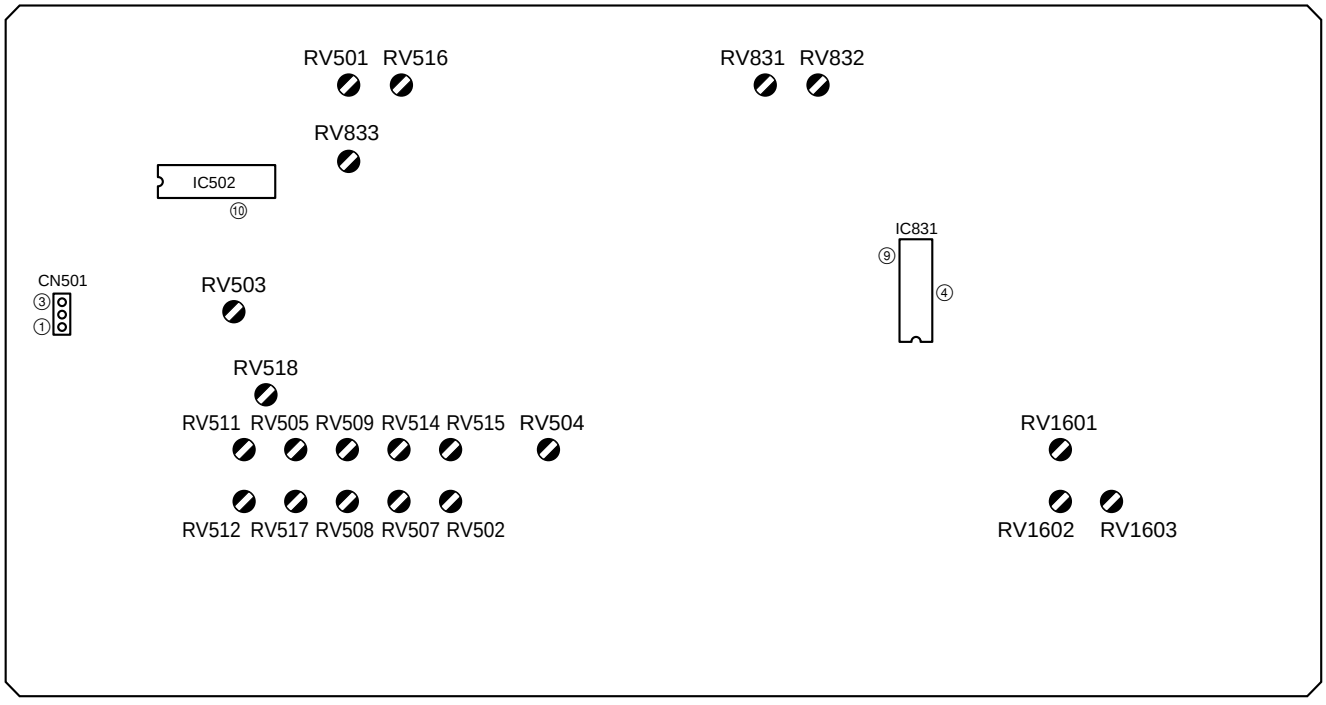
4-2-2. Protection Circuit Operation Check

Input signal: Dot pattern signal
Controls: BRIGHT ⇨ Minimum
CONTR ⇨ Minimum

1. Connect (+) side of ammeter to pin 8 of CN503 on the D board and (−) side to pin 8 of CN801 on the P board.
   Note: Connect film capacitor of 0.1 µF/100 V in parallel to the ammeter.
2. Adjust BRIGHT and CONTR controls of the front panel so that the reading (I_{ABL}) on the ammeter becomes the following specification.
   Specification: I_{ABL} = 160 ±30 µA
3. Apply 18.4 ±0.1 Vdc from the regulated DC power supply to TP85 (or pin 6 of CN503) on the D board. Adjust RV833 on the D board so that the protection circuit works.
4. Apply 17.6 ±0.1 Vdc from the regulated DC power supply to TP85 (or pin 6 of CN503) on the D board.
   Specification: Protection circuit becomes inoperative.
5. Input the all white signal from the test signal generator.
6. Adjust BRIGHT and CONTR controls of the front panel so that the reading (I_{ABL}) on the ammeter becomes the following specification.
   Specification: I_{ABL} = 520 ±30 µA
7. Apply 17.7 ±0.1 Vdc from the regulated DC power supply to TP85 (or pin 6 of CN503) on the D board.
   Specification: Protection circuit becomes operative.
8. Apply 16.9 ±0.1 Vdc from the regulated DC power supply to TP85 (or pin 6 of CN503) on the D board.
   Specification: Protection circuit becomes inoperative.
9. After the completion of steps 2 to 9, be sure to apply paint to RV833.

SECTION 5
CIRCUIT ADJUSTMENTS

5-1. D BOARD ADJUSTMENTS

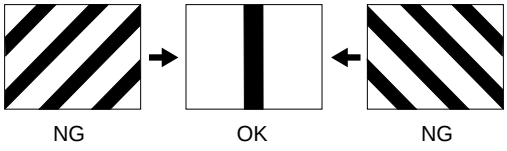


D Board Adjusting Components Location

5-1-1. Horizontal Oscillating Frequency Adjustment (RV503)

Input signal: Monoscope signal

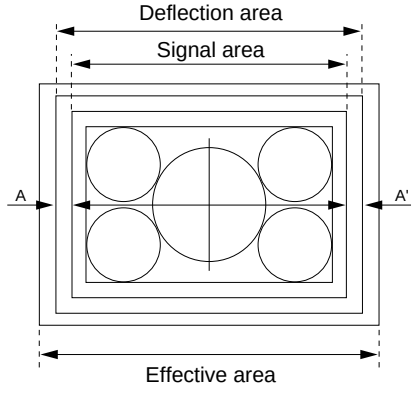
1. Connect (+) side of electrolytic capacitor of 0.1 µF/100 V to pin 1 of CN501 (or pin 1 of IC502) and (−) side to pin 3 of CN501 (or ground).
2. Connect a frequency counter to pin 10 of IC502. Adjust RV503 (H.FREQ) so that the frequency reading becomes the following specification.
   Specification: Frequecy = 15.734 kHz ±50 Hz
3. If the frequency counter is not available, adjust RV503 so that a horizontal-hold becomes stable.



5-1-2. Video Phase Adjustment (RV512, RV516, RV502)

Input signal: Monoscope signal
Switches: UNDER SCAN ⇨ Push (ON)
16 : 9 ⇨ Pull (4 : 3)
Controls: BRIGHT ⇨ Maximum
CONTR ⇨ Minimum

1. Adjust RV512 (U/H.SIZE) so that the white frame of monoscope signal is visible on the CRT screen.
2. Adjust RV516 (H.BLKG) so that the entire deflection area is visible on the CRT screen.
3. Turn RV502 (VIDEO PHASE) and make sure that the video phase is moving smoothly. Adjust RV502 so that the monoscope signal comes in the center of the signal area.

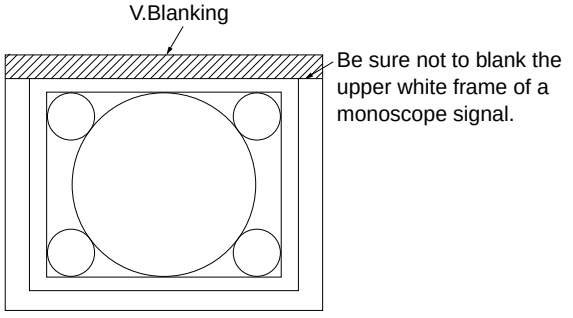


A = A'

5-1-3. Vertical Blanking Adjustment (RV501)

Input signal: Monoscope signal
Switches: UNDER SCAN ⇨ Push (ON)
16 : 9 ⇨ Pull (4 : 3)
Controls: BRIGHT ⇨ Maximum
CONTR ⇨ Minimum

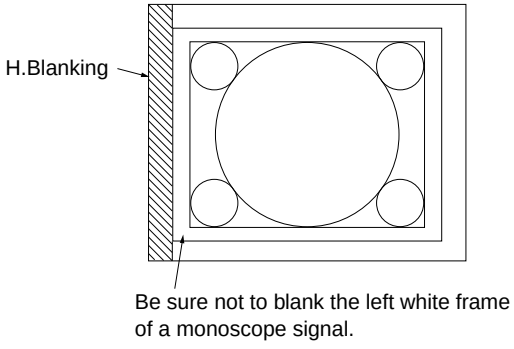
1. Adjust RV501 (V.BLKG) so that the upper white frame of monoscope signal is not blanked.



5-1-4. Horizontal Blanking Adjustment (RV516)

Input signal: Monoscope signal
Switches: UNDER SCAN ⇨ Push (ON)
16 : 9 ⇨ Pull (4 : 3)
Controls: BRIGHT ⇨ Maximum
CONTR ⇨ Minimum

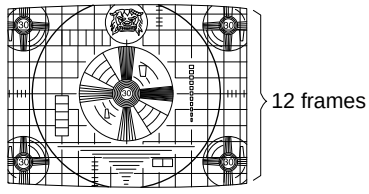
1. Adjust RV516 (H.BLKG) so that the left white frame of monoscope signal is not blanked.



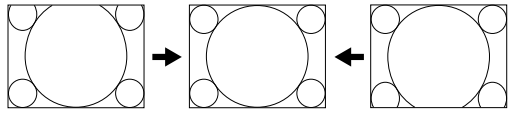
5-1-5. Vertical Deflection System Adjustment (RV505, RV507, RV504, RV518)

Input signal: Monoscope signal
Switches: UNDER SCAN ⇨ Pull (OFF)
16 : 9 ⇨ Pull (4 : 3)
Controls: BRIGHT ⇨ 50 % (Center click)
CONTR ⇨ 70 %

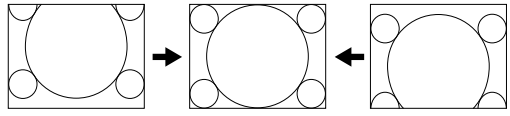
1. Adjust RV505 (V.SIZE) so that the vertical size of monoscope signal on the CRT screen is 12 frames.



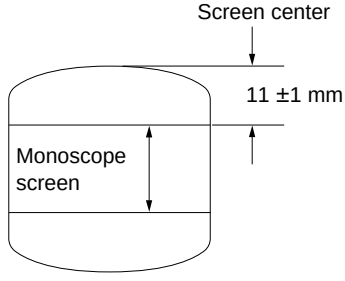
2. Adjust the vertical linearity with RV507 (V.LINE).



3. Adjust the vertical position with RV504 (V.CENT).



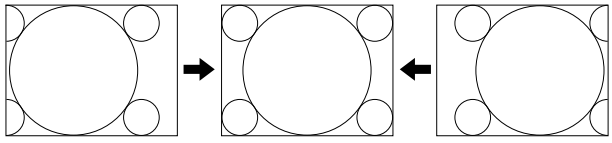
4. Press the UNDER SCAN switch of the front panel.
5. Press the 16 : 9 switch of the front panel.
6. Adjust the vertical size with RV518 (16 : 9 V.SIZE).



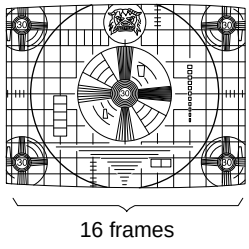
5-1-6. Horizontal Deflection System Adjustment (RV508, RV509, RV511, RV514, RV515, and RV801/P Board)

Input signal:	Monoscope signal	
Switches:	UNDER SCAN	⇨ Pull (OFF)
	16 : 9	⇨ Pull (4 : 3)
Controls:	BRIGHT	⇨ 50 % (Center click)
	CONTR	⇨ 70 %

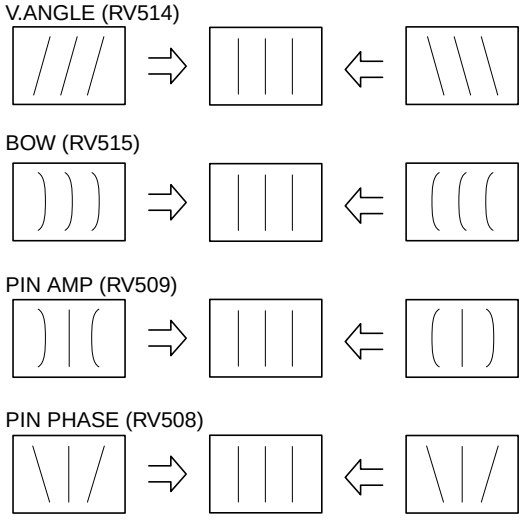
1. Adjust the horizontal position with RV801 (H.CENT).



2. Adjust RV511 (H.SIZE) so that the horizontal size of monoscope signal on the CRT screen is 16 frames.



3. While adjusting vertical angular and bow distortions with RV514 (V.ANG) and RV515 (BOW), adjust RV509 (PIN AMP) and RV508 (PIN PHASE) so that the vertical lines become straight.

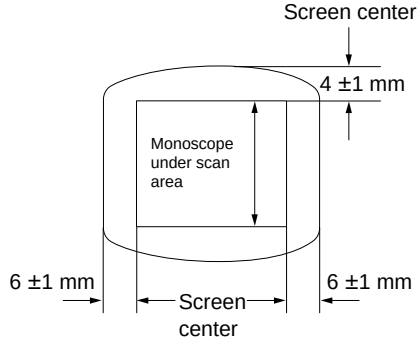


4. Adjust RV511 (H.SIZE) so that the horizontal size of monoscope signal on the CRT screen is 16 frames.

5-1-7. Under Scan Adjustment (RV517, RV512)

Input signal:	Monoscope signal	
Switches:	UNDER SCAN	⇨ Push (ON)
	16 : 9	⇨ Pull (4 : 3)
Controls:	BRIGHT	⇨ 50 % (Center click)
	CONTR	⇨ 70 %

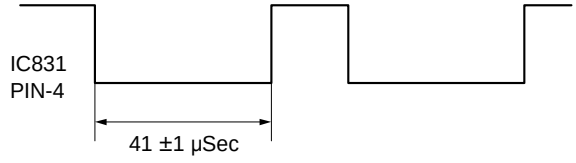
1. Adjust the horizontal size and vertical size with RV517 (U/V.SIZE) and RV512 (U/H.SIZE) as shown below.
   Note: Be careful not to wane four corners.



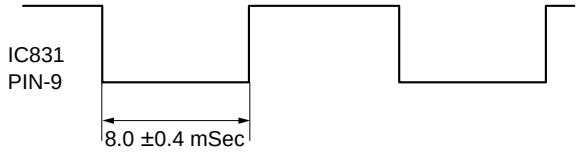
5-1-8. Horizontal/Vertical Delay Adjustment (RV832, RV831)

Input signal:	Monoscope signal	
Switches:	UNDER SCAN	⇨ Push (ON)
	16 : 9	⇨ Pull (4 : 3)
Controls:	BRIGHT	⇨ 50 % (Center click)
	CONTR	⇨ 70 %

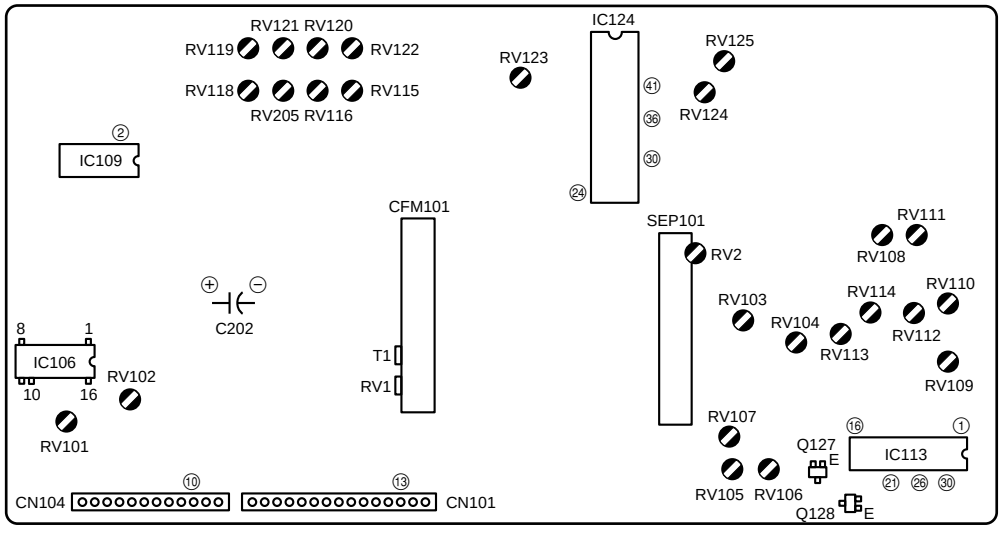
1. Connect an oscilloscope to pin 4 of IC831.
2. **Horizontal Delay Adjustment (RV832)**
   Adjust the pulse width with RV832 as shown below.



3. Connect an oscilloscope to pin 9 of IC831.
4. **Vertical Delay Adjustment (RV831)**
   Adjust the pulse width with RV831 as shown below.



5-2. B BOARD ADJUSTMENTS

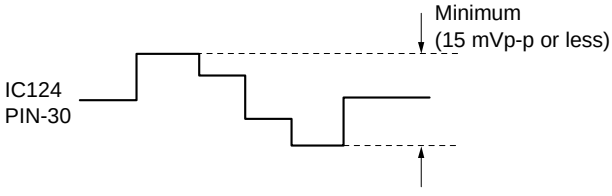


B Board Adjusting Components Location

5-2-1. Primary Color Matrix Adjustment (1) (RV115)

Input signal: Component color bars signal
(75 % chroma color bars signal)
Switches: UNDER SCAN ⇨ Pull (OFF)
16 : 9 ⇨ Pull (4 : 3)
SYNC INT/EXT ⇨ EXT
LINE/RGB ⇨ RGB

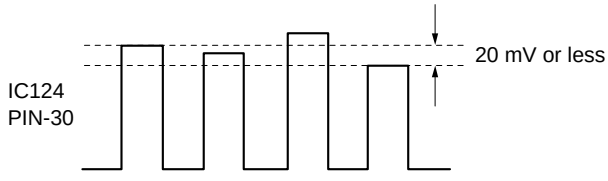
1. Supply a sync signal from the test signal generator to EXT SYNC IN connector of the rear panel.
2. Supply Y signal and R-Y signal from the test signal generator to RGB/COMPONENT connector of the rear panel.
3. Connect an oscilloscope to pin 30 (B OUT) of IC124.
4. Adjust RV115 (SUB HUE) to minimize (15 mVp-p or less) the B signal level.



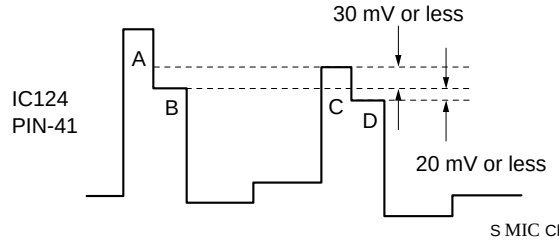
5-2-2. Primary Color Matrix Adjustment (2) (RV116, RV123)

Input signal: Component color bars signal
(75 % chroma color bars signal)
Switches: UNDER SCAN ⇨ Pull (OFF)
16 : 9 ⇨ Pull (4 : 3)
SYNC INT/EXT ⇨ INT
LINE/RGB ⇨ RGB

1. Supply Y, R-Y, and B-Y signals from the test signal generator to RGB/COMPONENT connectors.
2. Connect an oscilloscope to pin 30 (B OUT) of IC124.
3. Adjust RV116 (SUB COL) to minimize each peak level (20 mVp-p or less). Adjust so that the 1st and the 4th peaks should have the same level.



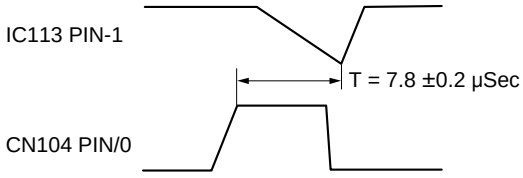
4. Connect an oscilloscope to pin 41 (R OUT) of IC124.
5. Adjust RV123 (MATRIX R-Y) so that the level difference of R signal is shown below.
   Specification:
   Level difference of B and D = Minimum (20 mV or less)
   Level difference of B and C = Minimum (30 mV or less)



5-2-3. Burst Gate Pulse Width Adjustment (RV109)

Input signal: Color bars signal (LINE A/VIDEO IN)
Switches: UNDER SCAN ⇨ Pull (OFF)
16 : 9 ⇨ Pull (4 : 3)
SYNC INT/EXT ⇨ INT
LINE/RGB ⇨ LINE

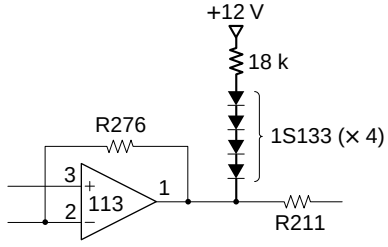
1. Connect an oscilloscope to pin 10 (COMP SYNC) of CN104 and pin 1 (BGP GEN) of IC113.
2. Adjust the pulse width (T) with RV109 (BGP WIDTH) as shown below.
   Specification: T = 7.8 ±0.2 µsec



5-2-4. NTSC Subcarrier Frequency Adjustment (RV1400)

Input signal: NTSC Color bars signal (LINE A/VIDEO IN)
Switches: UNDER SCAN ⇨ Pull (OFF)
16 : 9 ⇨ Pull (4 : 3)
SYNC INT/EXT ⇨ INT
LINE/RGB ⇨ LINE

1. Apply +5 V to pin 26 of IC113 via 4.7 kΩ resistor.
2. Connect pin 2 of IC109 to ground.
3. Connect the following circuit to pin 1 of IC113.
   Part Required
   Resistor 18 kΩ ..... 1 pc
   Diode 1SS133 ..... 4 pcs

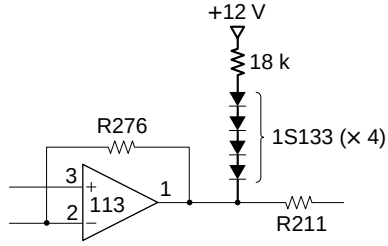


4. Connect the frequency counter to pin 21 of IC113.
5. Adjust the frequency with RV1400 (3.58 F0).
   Specification: F0 = 3,579,545 ±20 Hz

5-2-5. PAL Subcarrier Frequency Adjustment (RV1401)

Input signal: PAL Color bars signal (LINE A/VIDEO IN)
Switches: UNDER SCAN ⇨ Pull (OFF)
16 : 9 ⇨ Pull (4 : 3)
SYNC INT/EXT ⇨ INT
LINE/RGB ⇨ LINE

1. Apply +5 V to pin 26 of IC113 via 4.7 kΩ resistor.
2. Connect pin 2 of IC109 to +12 V line.
3. Connect the following circuit to pin 1 of IC113.
   Part Required
   Resistor 18 kΩ ..... 1 pc
   Diode 1SS133 ..... 4 pcs

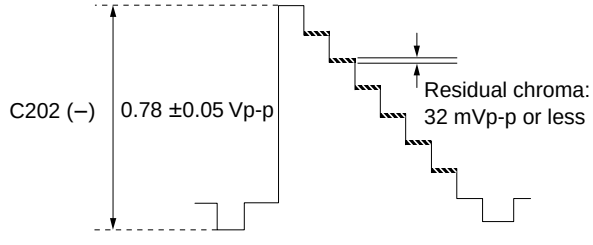


4. Connect the frequency counter to pin 21 of IC113.
5. Adjust the frequency with RV1401 (4.43 F0).
   Specification: F0 = 4,433,619 ±20 Hz

5-2-6. NTSC Comb Filter Adjustment (RV1, T1/CFM101)

Input signal: NTSC Color bars signal (LINE A/VIDEO IN)
Switches: UNDER SCAN ⇨ Pull (OFF)
16 : 9 ⇨ Pull (4 : 3)
SYNC INT/EXT ⇨ INT
LINE/RGB ⇨ LINE

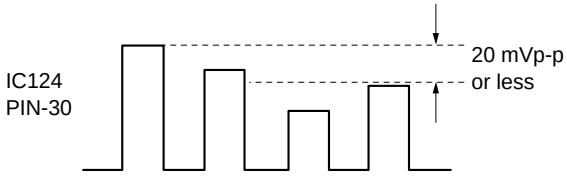
1. Connect an oscilloscope to minus (−) terminal of capacitor C202, and confirm the Y and residual chroma levels.
   Specification:
   Y level = 0.78 ±0.05 Vp-p
   Residual chroma level = 32 mVp-p or less
2. If the residual chroma level is out of specification, adjust RV1 and T1 alternately so that it is minimum.



5-2-7. NTSC 3.58 MHz Color Demodulation (B-Y) Adjustment (RV114, RV111)

Input signal: 3.58 MHz NTSC 75 % Color bars signal
(Set Y and B-Y of test signal generator to off.)
Switches: SYNC INT/EXT ⇨ INT
LINE/RGB ⇨ LINE

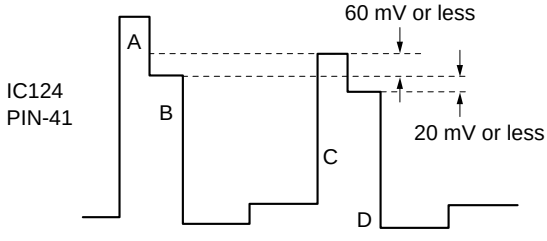
1. Connect an oscilloscope to emitter of Q128.
2. Adjust RV114 (3.58 NTSC HUE) so that the level other than the burst portion is flat (Voltage difference = 10 mV or less).
3. Set Y and B-Y of test signal generator to on.
4. Connect an oscilloscope to pin 30 of IC124.
5. Adjust RV111 (3.58 NTSC COL) so that the level difference of B signal is minimum (20 mVp-p or less). Adjust so that the 1st and the 4th peaks should have the same level.



5-2-8. NTSC 3.58 MHz Color Demodulation (R-Y) Adjustment (RV104, RV107)

Input signal: 3.58 MHz NTSC 75 % Color bars signal
(Set Y and R-Y of test signal generator to off.)
Switches: SYNC INT/EXT ⇨ INT
LINE/RGB ⇨ LINE

1. Connect an oscilloscope to emitter of Q127.
2. Adjust RV104 (3.58 NTSC SHIFT) so that the R level is flat (Voltage difference = ± 15 mV or less).
3. Set Y and R-Y of test signal generator to on.
4. Connect an oscilloscope to pin 41 of IC124.
5. Adjust RV107 (3.58 NTSC COL) so that the level difference of R signal is minimum.
   Specification:
   Level difference of B and D = Minimum (20 mV or less)
   Level difference of B and C = Minimum (60 mV or less)

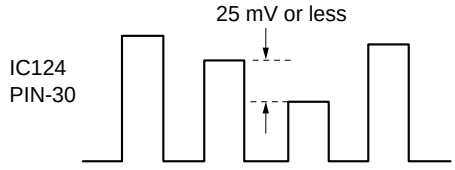


6. After adjustment, perform section "5-2-7. NTSC 3.58 MHz Color Demodulation (B-Y) Adjustment" again.

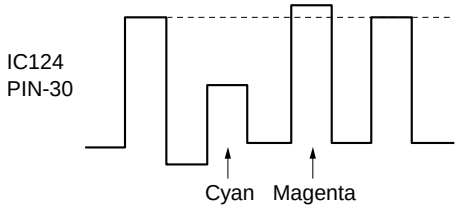
5-2-9. NTSC 4.43 MHz Color Demodulation Adjustment (RV108, RV112)

Input signal: 4.43 MHz NTSC 75 % Color bars signal
(Set Y and B-Y of test signal generator to off.)
Switches: SYNC INT/EXT ⇨ INT
LINE/RGB ⇨ LINE

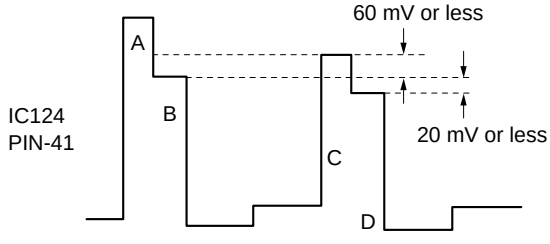
1. Connect an oscilloscope to pin 30 of IC124.
2. Adjust RV108 (4.43 NTSC COL) so that the level is flat (Voltage difference = 25 mV or less).



3. If cyan and magenta levels are different, adjust RV112 (4.43 NTSC HUE) and RV108 (4.43 NTSC COL) alternately.



4. Connect an oscilloscope to emitter of Q127.
5. Adjust RV103 (4.43 NTSC SHIFT) so that the R level is flat (Voltage difference = ± 15 mV or less).
6. Connect an oscilloscope to pin 41 of IC124.
7. Adjust RV106 (4.43 NTSC COL) so that the level difference of R signal is minimum.
   Specification:
   Level difference of B and D = Minimum (20 mV or less)
   Level difference of B and C = Minimum (60 mV or less)

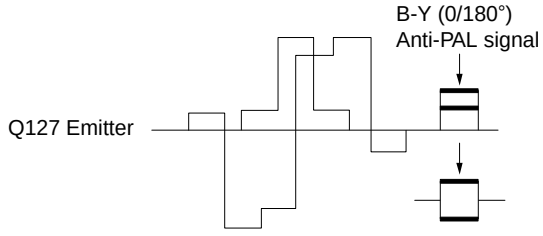


8. After adjustment, readjust from steps 1 to 7.

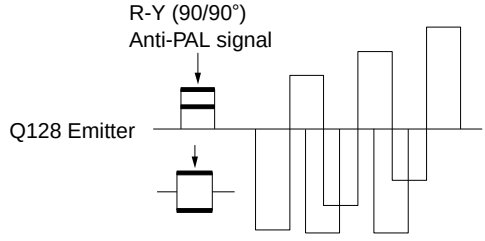
5-2-10. PAL Color Demodulation Adjustment (RV113, RV2/SEP101, RV110, RV105)

Input signal: PAL Special Color bars signal
PAL Color bars signal
Switches: SYNC INT/EXT ⇨ INT
LINE/RGB ⇨ LINE

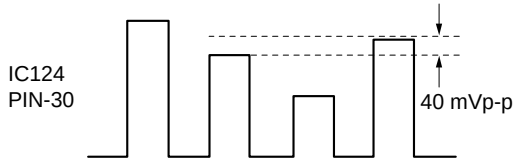
1. Connect an oscilloscope to emitter of Q127.
2. Adjust RV113 (PAL HUE) so that the B-Y (0/180°) anti-PAL signal on the R-Y demodulated signal is flat.



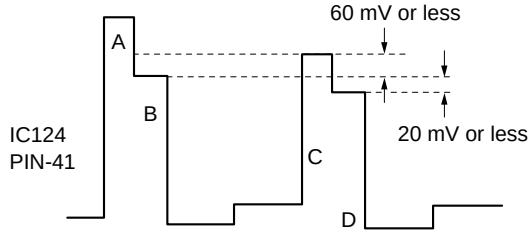
3. Connect an oscilloscope to emitter of Q128.
4. Adjust RV2 on the SEP101 so that the R-Y (90/90°) anti-PAL signal on the B-Y demodulated signal is flat.



5. Turn CHROMA control of the front panel maximum clockwise, and make sure of no color is visible at the anti-PAL signal portion on the CRT screen.
6. Input the PAL color bars signal.
7. Connect an oscilloscope to pin 30 of IC124.
8. Adjust RV110 (PAL COL) to minimize each peak level.



9. Connect an oscilloscope to pin 41 of IC124.
10. Adjust RV105 (PAL COL) so that the level difference of R signal is minimum.
    Specification:
    Level difference of B and D = Minimum (20 mV or less)
    Level difference of B and C = Minimum (60 mV or less)

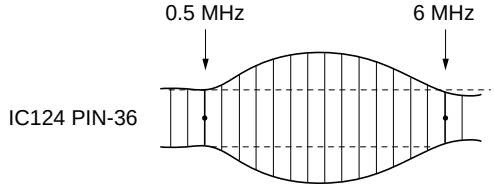


11. After adjustment, readjust from steps 7 to 10.

5-2-11. Sub-Sharpness Adjustment (RV205)

Input signal: Sweep signal
Bandwidth: 10 MHz or more (flat)
Burst: OFF
Composite Sync: ON
Switches: SYNC INT/EXT ⇨ INT
LINE/RGB ⇨ LINE

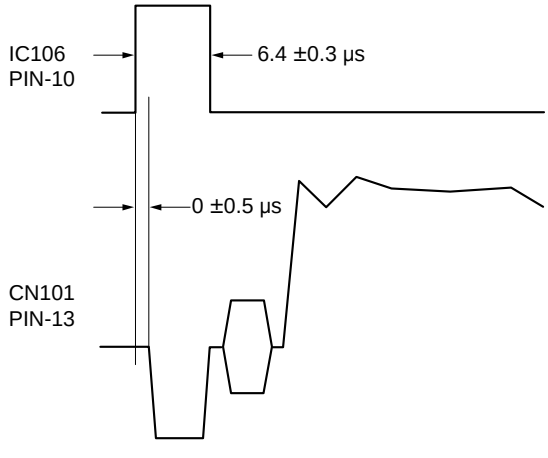
1. Connect an oscilloscope to pin 36 of IC124.
2. Adjust RV205 (SUB SHARP) so that the 0.5 MHz and 6 MHz portions of the sweep signal is equal level (0 ±0.5 dB).



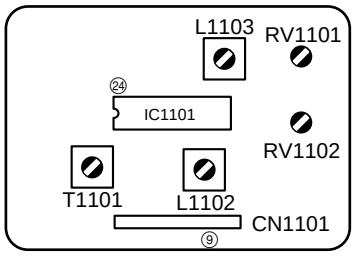
5-2-12. Chroma H Pulse Adjustment (RV101, RV102)

Input signal: SECAM Color Bars signal
Switches: SYNC INT/EXT ⇨ INT
LINE/RGB ⇨ LINE

1. Connect an oscilloscope to pin 10 of IC106 and pin 13 of CN101.
2. Adjust RV101 (PULSE WIDTH) so that the pulse width is shown in the following specification.
   Specification: Pulse width = 6.4 ±0.3 µs
   Note: No adjustment is required for the PAL-M model.
3. Adjust RV102 (PULSE POSI) so that the phase difference of H sync to chroma H pulse is shown in the following specification.
   Specification: Phase difference = 0 ±0.5 µs



5-3. S BOARD ADJUSTMENTS

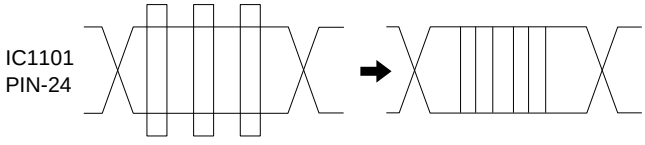


S Board Adjusting Components Location

5-3-1. SECAM Bell Filter Adjustment (T1101)

Input signal: SECAM color bars signal
Switches: SYNC INT/EXT ⇨ INT
LINE/RGB ⇨ LINE

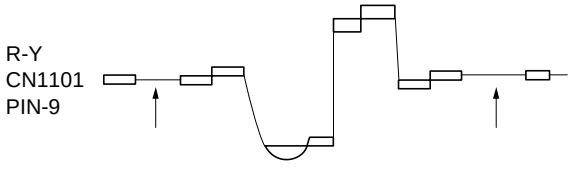
1. Connect an oscilloscope to pin 24 of IC1101.
2. Adjust T1101 (BELL FILTER) so that the envelope of chroma signal is flat.



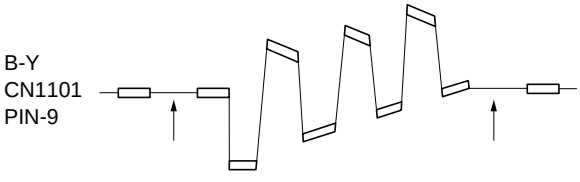
5-3-2. SECAM Color Balance Adjustment (L1102, L1103)

Input signal: SECAM color bars signal
Switches: SYNC INT/EXT ⇨ INT
LINE/RGB ⇨ LINE

1. Connect an oscilloscope to pin 9 of CN1101.
2. Adjust L1102 so that no chroma component (no colored) portions of R-Y signal is flat.



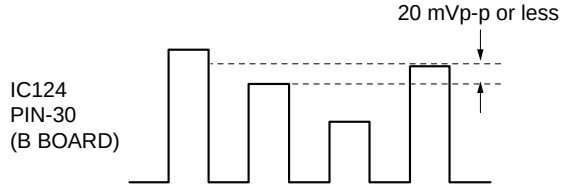
3. Adjust L1103 so that no chroma component (no colored) portions of B-Y signal is flat.



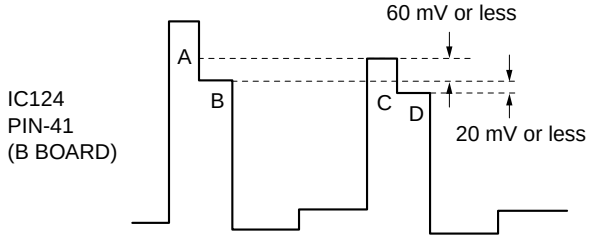
5-3-3. SECAM Demodulation Level Adjustment (RV1101, RV1102)

Input signal: SECAM color bars signal
Switches: SYNC INT/EXT ⇨ INT
LINE/RGB ⇨ LINE

1. Connect an oscilloscope to pin 30 of IC124 on the B board.
2. Adjust RV1101 (SECAM COL) so that the peak level difference of B signal is minimum (20 mVp-p or less). Adjust so that the 1st and the 4th peaks should have the same level.

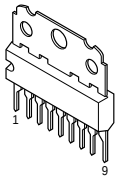


3. Connect an oscilloscope to pin 41 of IC124 on the B board.
4. Adjust RV1102 (SECAM R-Y) so that the level difference of R signal is minimum.
   Specification:
   Level difference of B and D = Minimum (20 mV or less)
   Level difference of B and C = Minimum (60 mV or less)

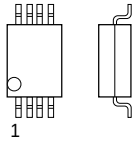


SECTION 6
SEMICONDUCTORS

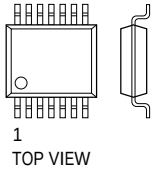
AN5265



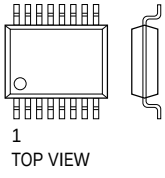
BA10393F-E2
MM1111XFBE
MM1113XBE
MM1114XFBE
TC4W53F



BU4011BF-E2
MC14066BF
BU4070BF-E2
BU4584BF-E2

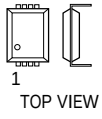


BU4053BCF
TC4052BFHB

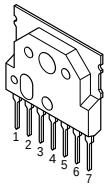


CXA1478S

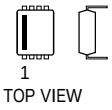
CX23025



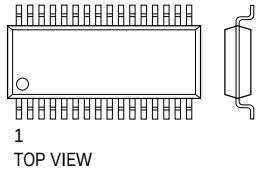
LA7830



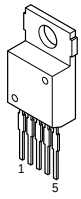
LM358D



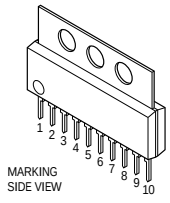
M51279FP



MC14538BF



MM1113XFBE



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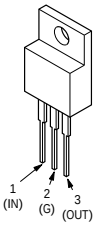

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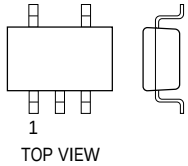

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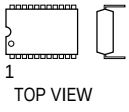

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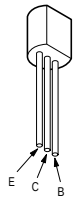

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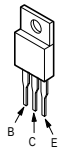
DTC124EK
DTC144EK-T147
DTC144EKA-T146

2SC2334-L
2SD1134-C
2SD835



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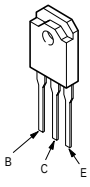

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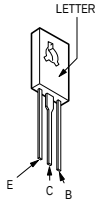

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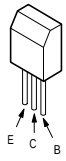

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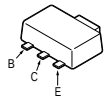

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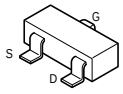

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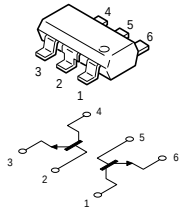

DIODE

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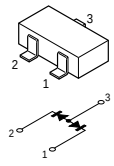

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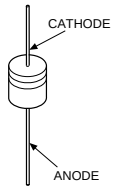
RD5.6ESB2
RD8.2ESB3



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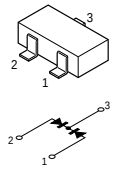

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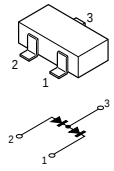

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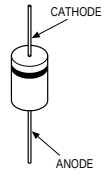
GP08D



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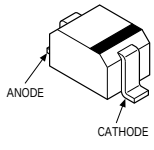
DTZ15B
DTZ20B
DTZ24B
DTZ8.2B
MA111



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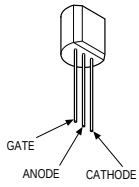

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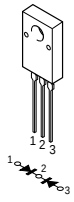
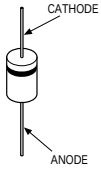


ERC81-004



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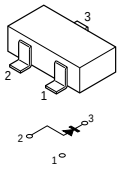

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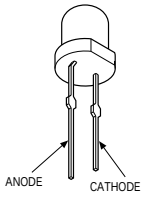
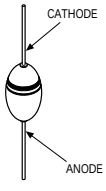


V11N



SECTION 7
EXPLODED VIEWS

NOTE:

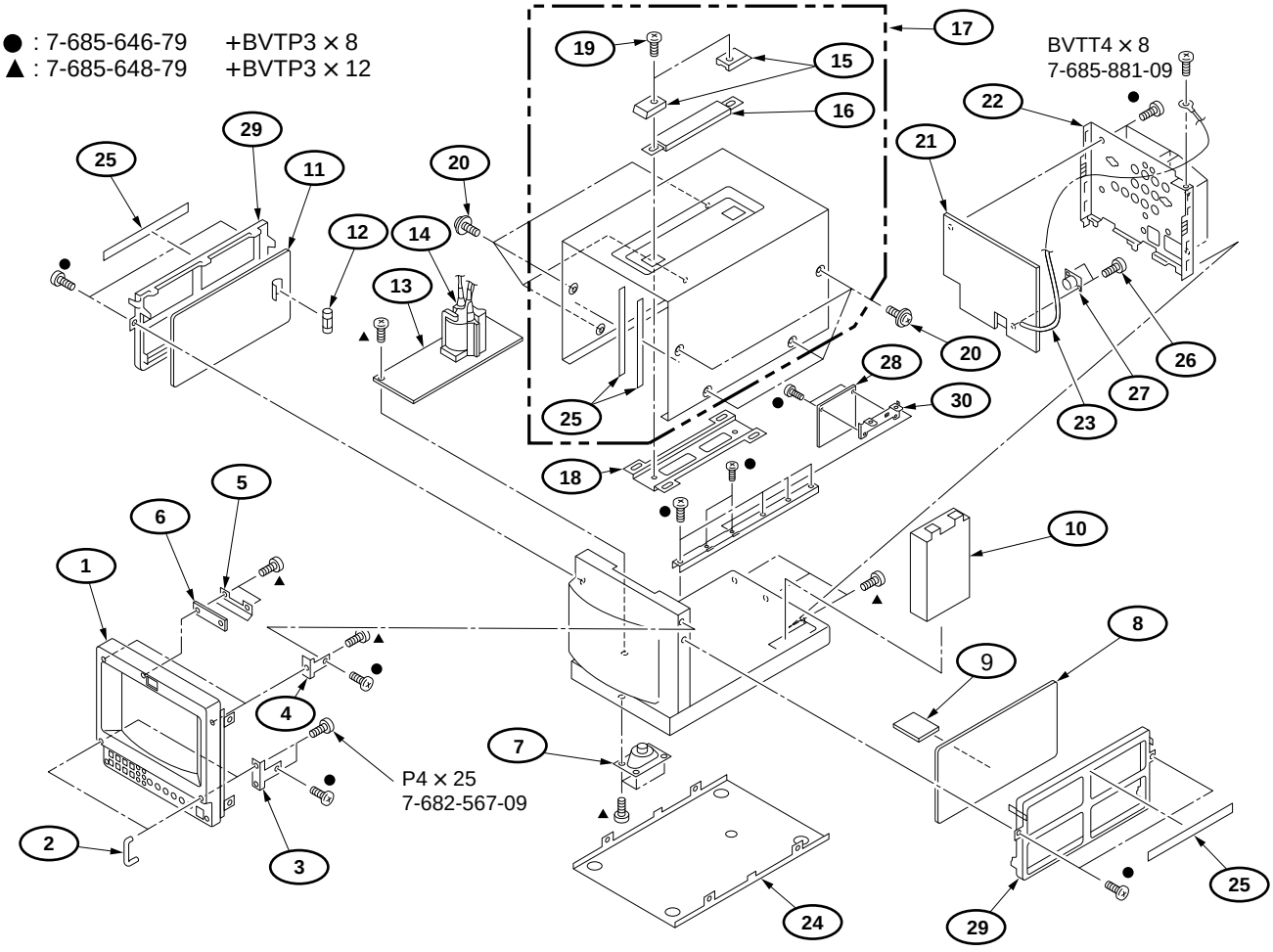
- Items with no part number and no description are not stocked because they are seldom required for routine service.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The components identified by mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies par une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

7-1. CHASSIS

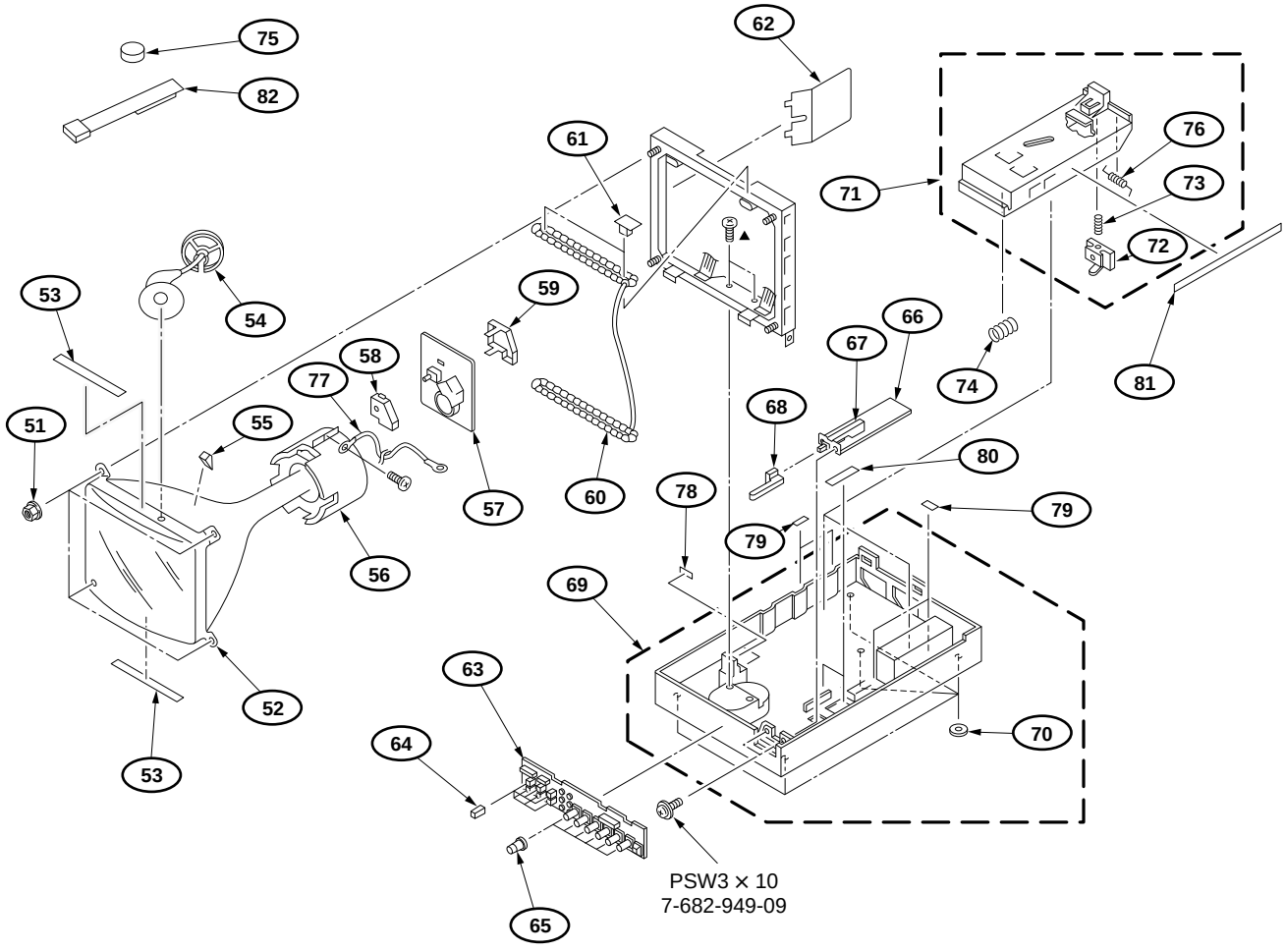
● : 7-685-646-79 +BVTP3 × 8
▲ : 7-685-648-79 +BVTP3 × 12



Ref.No.	Part No.	Description	Remark
1	X-4036-091-1	BEZEL ASSY (PVM-8045Q, 9045QM, 9045PM)	
1	X-4036-092-1	BEZEL ASSY (PVM-8042Q, 9042QM)	
2	4-037-569-01	HANDLE, PROTECTOR	
3	* 4-034-845-01	BRACKET (L), BEZEL	
4	* 4-034-846-01	BRACKET (U), BEZEL	
5	* 4-035-388-01	PLATE, LIGHT INTERCEPTION	
6	* 1-641-724-12	X BOARD	
7	1-505-375-11	SPEAKER (4X7CM)	
8	* A-1135-964-A	B BOARD, COMPLETE (PVM-8042Q, 8045Q)	
8	* A-1135-977-A	B BOARD, COMPLETE (PVM-9042QM, 9045QM)	
8	* A-1135-981-A	B BOARD, COMPLETE (PVM-9045PM)	
9	* A-1394-917-A	S BOARD, COMPLETE	
10	⚠1-413-720-21	SWITCHING REGULATOR (SOPS-1021 (A))	
11	* A-1346-787-A	D BOARD, COMPLETE (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
11	* A-1346-806-A	D BOARD, COMPLETE (PVM-9045PM)	
12	⚠1-532-747-11	FUSE, GLASS TUBE (5.0A/125V) (PVM-8042Q, 8045Q, 9045PM)	
12	⚠1-576-232-11	FUSE (H.B.C) (5.0A/250V) (PVM-9042QM, 9045QM)	
13	* A-1195-146-A	P BOARD, COMPLETE	
14	⚠1-439-526-11	TRANSFORMER ASSY, FLYBACK	
15	4-034-847-01	HANDLE (BASE)	
16	3-419-372-31	HANDLE	
17	X-4030-165-7	CABINET ASSY	15, 16, 19
18	* X-4030-273-1	REINFORCEMENT ASSY, HANDLE	
19	4-035-452-01	SCREW (M4X10)	
20	4-034-834-01	SCREW (CLAW) (4X6), CASE	
21	* A-1275-162-A	QA BOARD, COMPLETE	
22	* 4-034-864-81	CHASSIS, R	
23	1-555-724-00	WIRE, GROUND (PVM-8042Q, 8045Q, 9045PM)	
23	1-941-913-02	CORE, ASSY, FERRITE (PVM-9042QM, 9045PM, 9045QM)	
24	* 4-034-870-02	CABINET, BOTTOM	
25	* 4-035-691-01	CLOTH, VIBRATION PROOF	
26	4-035-802-01	SCREW (M2.6X6)	
27	1-900-157-02	CONNECTOR ASSY, MICRO 5P	
28	* A-1190-333-A	PA MOUNT	
29	* X-4030-274-1	FRAME ASSY, PWB	
30	* 4-067-394-01	HOLDER, PA PWB	

7-2. PICTURE TUBE

▲ : 7-685-648-79 +BVTP3 × 12



Ref.No.	Part No.	Description	Remark
51	4-304-511-00	NUT (M5), FLANGE	
52	⚠8-737-154-05	PICTURE TUBE SD-167	(PVM-8042Q, 9042Q)
52	⚠8-737-651-05	PICTURE TUBE 09FX	(PVM-8045Q, 9045PM)
53	4-035-332-01	CLOTH, PROTECTION	
54	* 4-034-856-01	HOLDER, HV CABLE	
55	4-309-369-00	SPACER, DEFLECTION YOKE	
56	⚠1-451-319-22	DEFLECTION YOKE (Y9FXC)	
57	* A-1331-183-B	CA BOARD, COMPLETE	
58	* 4-376-133-11	COVER (MAIN), CV VOL	
59	* 4-376-132-11	COVER (REAR LID), CV VOL	
60	⚠1-416-882-11	COIL, DEMAGNETIC	
61	4-380-534-01	CAP, DGC	
62	* 4-034-850-01	INSULATOR	
63	* A-1372-542-A	HA BOARD, COMPLETE	
64	4-034-849-01	SWITCH (SMALL), PUSH	
65	4-043-802-02	KNOB, CONTROL	
66	* A-1241-055-A	MOUNTED PWB, FA	(PVM-8042Q, 8045Q, 9045PM)

Ref.No.	Part No.	Description	Remark
66	* A-1241-070-A	MOUNTED PWB, FA	(PVM-9042QM, 9045QM)
67	⚠1-692-049-11	SWITCH, PUSH (AC POWER) (1 KEY)	(3A/250V) (PVM-8042Q, 8045Q, 9045PM)
67	⚠1-692-050-11	SWITCH, PUSH (AC POWER) 5A/250V	(PVM-8042QM, 9045QM)
68	4-034-841-11	BUTTON, POWER SWITCH	
69	* X-4036-112-2	CHASSIS ASSY, BOTTOM	
70	4-034-840-01	RUBBER, FOOT	
71	* X-4030-163-1	GUIDE ASSY, BATTERY	
72	4-034-861-01	KNOB, BATTERY	
73	4-876-347-01	SPRING, COMPRESSION	
74	3-669-594-00	SPRING, COMPRESSION	
75	* 1-452-884-11	MAGNET	
76	* 3-669-592-00	SPRING (A), TORSION	
77	1-923-511-84	WIRE UL1007 AWG18 110MM BLK	
78	* 4-036-047-02	RUBBER, VIBRATION PROOF	
79	3-839-640-00	CUSHION	
80	3-831-441-11	CUSHION (F)	
81	* 4-035-691-01	CLOTH, VIBRATION PROOF	
82	4-051-735-22	PIECE A (75), CONV. CORRECT	

SECTION 8
ELECTRICAL PARTS LIST

NOTE:

The components identified by mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies par une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.

RESISTORS
- All resistors are in ohms
- F: nonflammable

When indicating parts by reference number, please include the board name.

- CAPACITORS
  PF: μμ F
- There are some cases the reference number on one board overlaps on the other board. Therefore, when ordering parts by the reference number, please include the board name.
- The components identified by ⧓ in this manual have been carefully factory-selected for each set in order to satisfy regulations regarding X-ray radiation.
  Should replacement be required, replace only with the value originally used.

B

Ref.No.	Part No.	Description	Remark
	* A-1135-964-A	B BOARD, COMPLETE (PVM-8042Q, 8045Q)	
	* A-1135-977-A	B BOARD, COMPLETE (PVM-9042QM, 9045QM)	
	* A-1135-981-A	B BOARD, COMPLETE (PVM-9045PM)	
		**********	
		<BAND PASS FILTER>	
BPF101	1-236-363-11	FILTER, BAND PASS	
BPF102	1-236-363-11	FILTER, BAND PASS (PVM-9045PM)	
BPF102	1-236-364-11	FILTER, BAND PASS (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
		<CAPACITOR>	
C101	1-124-589-11	ELECT 47µF 20% 16V	
C102	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C103	1-126-157-11	ELECT 10µF 20% 16V	
C104	1-163-031-11	CERAMIC CHIP 0.01µF 50V (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
C105	1-163-031-11	CERAMIC CHIP 0.01µF 50V (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
C106	1-104-664-11	ELECT 47µF 20% 16V	
C107	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C108	1-104-664-11	ELECT 47µF 20% 16V	
C109	1-104-664-11	ELECT 47µF 20% 16V	
C110	1-104-666-11	ELECT 220µF 20% 16V	
C111	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C112	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C113	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C114	1-104-664-11	ELECT 47µF 20% 16V	
C115	1-163-031-11	CERAMIC CHIP 0.01µF 50V (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
C116	1-124-589-11	ELECT 47µF 20% 16V	
C117	1-124-589-11	ELECT 47µF 20% 6.3V	
C118	1-124-589-11	ELECT 47µF 20% 6.3V	
C119	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C120	1-124-589-11	ELECT 47µF 20% 6.3V	
C121	1-124-589-11	ELECT 47µF 20% 6.3V	
C122	1-104-664-11	ELECT 47µF 20% 16V	
C123	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C124	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C125	1-124-589-11	ELECT 47µF 20% 6.3V	
C126	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C127	1-124-589-11	ELECT 47µF 20% 6.3V	
C128	1-124-589-11	ELECT 47µF 20% 6.3V	
C129	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C130	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C131	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C132	1-124-589-11	ELECT 47µF 20% 16V	
C133	1-124-589-11	ELECT 47µF 20% 16V	
C134	1-163-275-11	CERAMIC CHIP 0.001µF 5% 50V (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
C135	1-163-113-00	CERAMIC CHIP 68PF 5% 50V (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
C137	1-163-249-11	CERAMIC CHIP 82PF 5% 50V	
C138	1-124-589-11	ELECT 47µF 20% 16V	
C139	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C140	1-163-205-00	CERAMIC CHIP 0.001µF 5% 50V	
C141	1-163-141-00	CERAMIC CHIP 0.001µF 5% 50V	
C142	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C143	1-163-121-00	CERAMIC CHIP 150PF 5% 50V	
C144	1-163-101-00	CERAMIC CHIP 22PF 5% 50V	
C145	1-163-131-00	CERAMIC CHIP 390PF 5% 50V	
C146	1-126-157-11	ELECT 10µF 20% 16V	
C147	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C148	1-126-160-11	ELECT 1µF 20% 50V	
C149	1-163-022-00	CERAMIC CHIP 0.012µF 10% 50V	
C150	1-124-589-11	ELECT 47µF 20% 16V	
C151	1-163-131-00	CERAMIC CHIP 390PF 5% 50V	
C152	1-163-101-00	CERAMIC CHIP 22PF 5% 50V	
C153	1-163-259-91	CERAMIC CHIP 220PF 5% 50V	
C154	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C155	1-163-133-00	CERAMIC CHIP 470PF 5% 50V	
C156	1-164-299-11	CERAMIC CHIP 0.22µF 10% 25V	
C157	1-163-229-11	CERAMIC CHIP 12PF 5% 50V (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
C158	1-104-664-11	ELECT 47µF 20% 16V	
C159	1-163-229-11	CERAMIC CHIP 12PF 5% 50V	
C160	1-163-229-11	CERAMIC CHIP 12PF 5% 50V	
C161	1-124-902-00	ELECT 0.47µF 20% 50V	
C162	1-124-903-11	ELECT 1µF 20% 50V	
C163	1-163-809-11	CERAMIC CHIP 0.047µF 10% 25V	
C164	1-163-809-11	CERAMIC CHIP 0.047µF 10% 25V	
C165	1-163-009-11	CERAMIC CHIP 0.001µF 10% 50V	
C166	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C167	1-104-664-11	ELECT 47µF 20% 16V	
C168	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C169	1-163-243-11	CERAMIC CHIP 47PF 5% 50V	
C170	1-163-129-00	CERAMIC CHIP 330PF 5% 50V	
C171	1-163-243-11	CERAMIC CHIP 47PF 5% 50V	
C172	1-163-129-00	CERAMIC CHIP 330PF 5% 50V	
C173	1-124-589-11	ELECT 47µF 20% 16V	
C174	1-104-664-11	ELECT 47µF 20% 16V	
C175	1-104-987-11	MYLAR 0.001µF 5% 50V	
C176	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C177	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C178	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C179	1-126-160-11	ELECT 1µF 20% 50V	
C180	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C181	1-124-589-11	ELECT 47µF 20% 6.3V	
C182	1-124-259-11	ELECT 4.7µF 20% 16V	
C183	1-163-021-91	CERAMIC CHIP 0.01µF 10% 50V	
C184	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C185	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C186	1-163-233-11	CERAMIC CHIP 18PF 5% 50V	
C187	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C188	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C189	1-163-035-00	CERAMIC CHIP 0.047µF 50V	
C190	1-163-121-00	CERAMIC CHIP 150PF 5% 50V (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
C192	1-163-031-11	CERAMIC CHIP 0.01µF 50V	
C193	1-124-589-11	ELECT 47µF 20% 16V (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
C194	1-124-589-11	ELECT 47µF 20% 16V	
C195	1-124-589-11	ELECT 47µF 20% 16V	
C196	1-124-589-11	ELECT 47µF 20% 16V	
C197	1-124-589-11	ELECT 47µF 20% 16V (PVM-8042Q, 8045Q, 9042QM, 9045QM)	

Ref.No.	Part No.	Description			Remark
C198	1-124-589-11	ELECT	47µF	20%	16V
C199	1-124-589-11	ELECT	47µF	20%	16V
C202	1-124-589-11	ELECT	47µF	20%	16V
C203	1-124-589-11	ELECT	47µF	20%	16V
C204	1-124-589-11	ELECT	47µF	20%	16V
C205	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C206	1-164-298-11	CERAMIC CHIP	0.15µF	10%	25V
C207	1-164-298-11	CERAMIC CHIP	0.15µF	10%	25V
C208	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C209	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C210	1-124-589-11	ELECT	47µF	20%	16V
C211	1-124-589-11	ELECT	47µF	20%	16V
C212	1-124-589-11	ELECT	47µF	20%	16V
C213	1-124-589-11	ELECT	47µF	20%	16V
C214	1-126-157-11	ELECT	10µF	20%	16V
C215	1-126-157-11	ELECT	10µF	20%	16V
C216	1-126-157-11	ELECT	10µF	20%	16V
C217	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C218	1-164-298-11	CERAMIC CHIP	0.15µF	10%	25V
C219	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C220	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C221	1-124-903-11	ELECT	1µF	20%	50V
C222	1-163-093-00	CERAMIC CHIP	10PF	5%	50V
C223	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C225	1-104-664-11	ELECT	47µF	20%	16V
C226	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C227	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C228	1-163-986-00	CERAMIC CHIP	0.027µF	10%	25V
C229	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C230	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C231	1-163-986-00	CERAMIC CHIP	0.027µF	10%	25V
C232	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C233	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C234	1-163-038-91	CERAMIC CHIP	0.1µF		25V
C235	1-163-986-00	CERAMIC CHIP	0.027µF	10%	25V
C236	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C237	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C238	1-164-299-11	CERAMIC CHIP	0.22µF	10%	25V
C239	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C240	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C241	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C242	1-163-113-00	CERAMIC CHIP	68PF	5%	50V
C243	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C244	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C245	1-163-105-00	CERAMIC CHIP	33PF	5%	50V
C246	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C247	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C248	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C249	1-104-665-11	ELECT	100µF	20%	16V
C250	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C251	1-110-364-11	MYLAR	0.1µF	10%	200V
C252	1-107-638-11	ELECT	33µF	20%	160V
C253	1-104-664-11	ELECT	47µF	20%	16V
C254	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C255	1-104-664-11	ELECT	47µF	20%	16V
C256	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C257	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C258	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C259	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C260	1-124-465-00	ELECT	0.47µF	20%	50V
C261	1-137-193-11	FILM	0.39µF	5%	50V
C262	1-124-465-00	ELECT	0.47µF	20%	50V
C264	1-163-123-00	CERAMIC CHIP	180PF	5%	50V
C265	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C266	1-107-714-11	ELECT	10µF	20%	16V
C267	1-107-714-11	ELECT	10µF	20%	16V
C268	1-104-664-11	ELECT	47µF	20%	16V
C269	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C270	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C271	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C272	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C273	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C274	1-104-664-11	ELECT	47µF	20%	16V
C275	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C277	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C278	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C279	1-126-157-11	ELECT	10µF	20%	16V
C280	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C281	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C282	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C283	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C299	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C300	1-126-157-11	ELECT	10µF	20%	16V
C301	1-163-809-11	CERAMIC CHIP	0.047µF	10%	25V
C302	1-124-589-11	ELECT	47µF	20%	16V
C303	1-126-157-11	ELECT	10µF	20%	16V
C304	1-163-125-00	CERAMIC CHIP	220PF	5%	50V
C305	1-117-378-11	FILM	1µF	5%	50V
C306	1-163-115-00	CERAMIC CHIP	82PF	5%	50V
C307	1-163-145-00	CERAMIC CHIP	0.0015µF	5%	50V
C308	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V (PVM-8042Q, 8045Q, 9042QM, 9045QM)
C309	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V (PVM-8042Q, 8045Q, 9042QM, 9045QM)
C310	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V (PVM-8042Q, 8045Q, 9042QM, 9045QM)
C312	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C313	1-163-115-00	CERAMIC CHIP	82PF	5%	50V
C314	1-126-157-11	ELECT	10µF	20%	16V
C315	1-164-299-11	CERAMIC CHIP	0.22µF	10%	25V
C316	1-126-157-11	ELECT	10µF	20%	16V
C317	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C318	1-163-095-00	CERAMIC CHIP	12PF	5%	50V
C319	1-163-095-00	CERAMIC CHIP	12PF	5%	50V
C320	1-163-095-00	CERAMIC CHIP	12PF	5%	50V
C321	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C322	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C324	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C340	1-163-205-00	CERAMIC CHIP	0.001µF	5%	50V
C344	1-163-092-00	CERAMIC CHIP	9PF	0.25PF	50V
C345	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C346	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C347	1-163-109-00	CERAMIC CHIP	47PF	5%	50V
C1293	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C1294	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C1295	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C1296	1-163-115-00	CERAMIC CHIP	82PF	5%	50V
C1297	1-163-103-00	CERAMIC CHIP	27PF	5%	50V

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Ref.No.	Part No.	Description	Remark
C1298	1-163-113-00	CERAMIC CHIP 68PF 5%	50V
C1299	1-163-093-00	CERAMIC CHIP 10PF 5%	50V
C1300	1-126-160-11	ELECT 1µF 20%	50V
C1301	1-126-160-11	ELECT 1µF 20%	50V
C1302	1-126-160-11	ELECT 1µF 20%	50V
C1303	1-126-160-11	ELECT 1µF 20%	50V
C1400	1-163-141-00	CERAMIC CHIP 0.001µF 5%	50V
C1401	1-163-141-00	CERAMIC CHIP 0.001µF 5%	50V
C1402	1-163-031-11	CERAMIC CHIP 0.01µF	50V
C1403	1-163-021-91	CERAMIC CHIP 0.01µF 10%	50V
C1404	1-164-004-11	CERAMIC CHIP 0.1µF 10%	25V
		<FILTER>	
CFM101	1-464-880-11	FILTER BLOCK, COM (CFB-2)	
		<CONNECTOR>	
CN101	1-506-480-11	PIN, CONNECTOR 15P	
CN102	* 1-564-506-11	PLUG, CONNECTOR 3P	
CN103	* 1-565-503-11	CONNECTOR, BOARD TO BOARD 12P (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
CN104	* 1-564-011-11	PIN, CONNECTOR 12P	
CN105	* 1-564-509-11	PLUG, CONNECTOR 6P	
CN106	1-506-473-11	PIN, CONNECTOR 8P	
CN107	1-506-478-11	PIN, CONNECTOR 13P	
CN108	* 1-564-506-11	PLUG, CONNECTOR 3P	
		<TRAP MODULE>	
CTR101	1-236-366-11	MODULE, TRAP (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
CTR101	1-236-369-11	MODULE, TRAP (PVM-9045PM)	
CTR102	1-236-365-11	MODULE, TRAP (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
		<DIODE>	
D102	8-719-404-49	DIODE MA111 (PVM-9045PM)	
D103	8-719-404-49	DIODE MA111	
D104	8-719-404-49	DIODE MA111	
D105	8-719-404-49	DIODE MA111 (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
D106	8-719-404-49	DIODE MA111	
D107	8-719-404-49	DIODE MA111	
D108	8-719-404-49	DIODE MA111 (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
D109	8-719-404-49	DIODE MA111	
D110	8-719-404-49	DIODE MA111	
D111	8-719-404-49	DIODE MA111	
D112	8-719-404-49	DIODE MA111	
D113	8-719-404-49	DIODE MA111	
D116	8-719-404-49	DIODE MA111 (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
D117	8-719-404-49	DIODE MA111	
D120	8-719-404-49	DIODE MA111	
D121	8-719-404-49	DIODE MA111 (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
D122	8-719-404-49	DIODE MA111	
D123	8-719-404-49	DIODE MA111	

Ref.No.	Part No.	Description	Remark
D125	8-719-404-49	DIODE MA111	
D126	8-719-404-49	DIODE MA111	
D127	8-719-404-49	DIODE MA111	
D128	8-719-801-78	DIODE 1SS184	
D129	8-719-404-49	DIODE MA111	
D130	8-719-800-76	DIODE 1SS226	
D131	8-719-800-76	DIODE 1SS226	
D132	8-719-800-76	DIODE 1SS226	
D133	8-719-404-49	DIODE MA111	
D134	8-719-404-49	DIODE MA111	
D135	8-719-404-49	DIODE MA111	
D136	8-719-404-49	DIODE MA111	
D137	8-719-404-49	DIODE MA111	
D138	8-719-404-49	DIODE MA111	
D139	8-719-404-49	DIODE MA111	
D144	8-719-404-49	DIODE MA111	
D145	8-719-404-49	DIODE MA111	
D146	8-719-404-49	DIODE MA111	
D147	8-719-404-49	DIODE MA111	
D148	8-719-404-49	DIODE MA111	
D149	8-719-404-49	DIODE MA111	
D150	8-719-404-49	DIODE MA111	
D151	8-719-404-49	DIODE MA111	
D152	8-719-404-49	DIODE MA111	
D153	8-719-977-20	DIODE DTZ8.2B	
D154	8-719-404-49	DIODE MA111	
D155	8-719-404-49	DIODE MA111	
D156	8-719-404-49	DIODE MA111	
D157	8-719-901-83	DIODE 1SS83	
D158	8-719-901-83	DIODE 1SS83	
D159	8-719-901-83	DIODE 1SS83	
D160	8-719-404-49	DIODE MA111	
D161	8-719-404-49	DIODE MA111	
D162	8-719-404-49	DIODE MA111	
D170	8-719-404-49	DIODE MA111	
D185	8-719-104-34	DIODE 1S2836 (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
D186	8-719-801-78	DIODE 1SS184 (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
D187	8-719-800-76	DIODE 1SS226	
D188	8-719-800-76	DIODE 1SS226	
D191	8-719-104-34	DIODE 1S2836	
D285	8-719-404-49	DIODE MA111	
D289	8-719-404-49	DIODE MA111	
D341	8-719-404-49	DIODE MA111	
D342	8-719-104-34	DIODE 1S2836 (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
D343	8-719-800-76	DIODE 1SS226	
D344	8-719-105-99	DIODE RD6.2M-B1 (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
D345	8-719-901-83	DIODE 1SS83	
D346	8-719-901-83	DIODE 1SS83	
D347	8-719-901-83	DIODE 1SS83	
D348	8-719-800-76	DIODE 1SS226	
D349	8-719-800-76	DIODE 1SS226	
D350	8-719-800-76	DIODE 1SS226	
D390	8-719-800-76	DIODE 1SS226 (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
D393	8-719-404-49	DIODE MA111	

B

Ref.No.	Part No.	Description	Remark
D1400	8-719-045-70	DIODE 1SV230TPH3	
D1401	8-719-404-49	DIODE MA111	
		<DELAY LINE>	
DL101	1-415-632-11	DELAY LINE, Y	
DL102	1-415-633-11	DELAY LINE, Y	
		<IC>	
IC101	8-759-432-78	IC MM1111XFBE	
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)	
IC102	8-759-446-66	IC MM1113XFBE	
IC103	8-759-446-66	IC MM1113XFBE	
IC104	8-759-446-66	IC MM1113XFBE	
IC105	8-759-432-78	IC MM1111XFBE	
IC106	8-759-009-51	IC MC14538BF	
IC107	8-759-473-08	IC BU4584BF-E2	
IC108	8-759-932-67	IC BU4053BCF	
IC109	8-759-473-07	IC BU4070BF-E2	
IC110	8-759-932-67	IC BU4053BCF	
IC111	8-759-932-67	IC BU4053BCF	
IC112	8-759-231-53	IC TA7805S	
IC113	8-759-631-08	IC M51279FP	
IC114	8-759-208-09	IC TC4052BFHB	
IC115	8-759-208-09	IC TC4052BFHB	
IC116	8-759-008-67	IC MC14066BF	
IC117	8-759-358-46	IC MM1114XFBE	
IC118	8-759-358-46	IC MM1114XFBE	
IC119	8-759-358-46	IC MM1114XFBE	
IC120	8-759-008-67	IC MC14066BF	
IC121	8-759-932-67	IC BU4053BCF	
IC122	8-759-998-98	IC LM358D	
IC123	8-759-998-98	IC LM358D	
IC124	8-752-052-62	IC CXA1478S	
IC125	8-759-008-67	IC MC14066BF	
IC126	8-759-932-67	IC BU4053BCF	
IC127	8-759-998-98	IC LM358D	
IC128	8-759-998-98	IC LM358D	
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)	
IC129	8-759-998-98	IC LM358D	
IC1400	8-759-242-64	IC TC4W53F	
IC1401	8-759-209-97	IC TC4S81F	
		<CHIP CONDUCTOR>	
JR105	1-216-295-91	SHORT 0	
JR110	1-216-295-91	SHORT 0	
JR113	1-216-295-91	SHORT 0 (PVM-9045PM)	
JR133	1-216-295-91	SHORT 0	
JR138	1-216-295-91	SHORT 0	
JR178	1-216-295-91	SHORT 0	
		<COIL>	
L101	1-410-470-11	INDUCTOR 10µH	
L102	1-410-090-41	INDUCTOR 18mH	
L103	1-412-002-31	INDUCTOR CHIP 4.7µH	
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)	
L104	1-412-002-31	INDUCTOR CHIP 4.7µH	
L105	1-412-002-31	INDUCTOR CHIP 4.7µH	
L106	1-410-470-11	INDUCTOR 10µH	
L107	1-410-470-11	INDUCTOR 10µH	
L112	1-408-613-31	INDUCTOR 68µH	
L113	1-410-947-31	INDUCTOR CHIP 33µH	
L114	1-410-947-31	INDUCTOR CHIP 3µH	
L115	1-410-947-31	INDUCTOR CHIP 33µH	
L116	1-412-011-31	INDUCTOR CHIP 27µH	
L117	1-412-011-31	INDUCTOR CHIP 27µH	
L118	1-412-011-31	INDUCTOR CHIP 27µH	
L252	1-410-478-11	INDUCTOR 47µH	
L300	1-410-482-31	INDUCTOR 100µH	
L1400	1-410-196-11	INDUCTOR CHIP 2.2µH	
		<TRANSISTOR>	
Q101	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q102	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q103	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q104	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q105	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q106	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q107	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q108	8-729-216-22	TRANSISTOR 2SA1162-G	
Q109	1-801-806-11	TRANSISTOR DTC144EK-T147	
Q112	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q113	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q114	8-729-216-22	TRANSISTOR 2SA1162-G	
Q115	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q116	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q117	8-729-216-22	TRANSISTOR 2SA1162-G	
Q118	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)	
Q119	8-729-216-22	TRANSISTOR 2SA1162-G	
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)	
Q120	8-729-216-22	TRANSISTOR 2SA1162-G	
Q121	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q122	8-729-216-22	TRANSISTOR 2SA1162-G	
Q123	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q124	8-729-216-22	TRANSISTOR 2SA1162-G	
Q125	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q126	1-801-806-11	TRANSISTOR DTC144EK-T147	
Q127	8-729-216-22	TRANSISTOR 2SA1162-G	
Q128	8-729-216-22	TRANSISTOR 2SA1162-G	
Q129	1-801-806-11	TRANSISTOR DTC144EK-T147	
Q130	8-729-216-22	TRANSISTOR 2SA1162-G	
Q132	8-729-216-22	TRANSISTOR 2SA1162-G	
Q134	1-801-806-11	TRANSISTOR DTC144EK-T147	
Q136	8-729-907-26	TRANSISTOR IMX1	
Q137	8-729-907-26	TRANSISTOR IMX1	
Q138	8-729-907-26	TRANSISTOR IMX1	
Q139	8-729-216-22	TRANSISTOR 2SA1162-G	
Q140	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q141	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q142	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q143	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q144	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q145	8-729-120-28	TRANSISTOR 2SC1623-L5L6	

B

Ref.No.	Part No.	Description	Remark
Q146	8-729-255-12	TRANSISTOR 2SC2551-O	
Q147	8-729-255-12	TRANSISTOR 2SC2551-O	
Q148	8-729-216-22	TRANSISTOR 2SA1162-G	
Q149	8-729-200-17	TRANSISTOR 2SA1091-O	
Q150	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q151	8-729-216-22	TRANSISTOR 2SA1162-G	
Q152	8-729-200-17	TRANSISTOR 2SA1091-O	
Q153	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q154	8-729-216-22	TRANSISTOR 2SA1162-G	
Q155	8-729-200-17	TRANSISTOR 2SA1091-O	
Q157	8-729-326-11	TRANSISTOR 2SC2611	
Q158	8-729-326-11	TRANSISTOR 2SC2611	
Q159	8-729-326-11	TRANSISTOR 2SC2611	
Q160	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q161	8-729-216-22	TRANSISTOR 2SA1162-G	
Q164	1-801-806-11	TRANSISTOR DTC144EK-T147	
Q165	8-729-216-22	TRANSISTOR 2SA1162-G	
Q166	8-729-216-22	TRANSISTOR 2SA1162-G	
Q167	8-729-216-22	TRANSISTOR 2SA1162-G	
Q168	8-729-216-22	TRANSISTOR 2SA1162-G	
Q170	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q171	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q172	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q173	8-729-216-22	TRANSISTOR 2SA1162-G	
Q174	8-729-216-22	TRANSISTOR 2SA1162-G	
Q175	8-729-216-22	TRANSISTOR 2SA1162-G	
Q176	8-729-216-22	TRANSISTOR 2SA1162-G	
Q177	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q178	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q179	1-801-806-11	TRANSISTOR DTC144EK-T147	
Q189	8-729-907-26	TRANSISTOR IMX1	
Q190	8-729-216-22	TRANSISTOR 2SA1162-G	
Q191	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q192	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q193	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q194	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q195	8-729-216-22	TRANSISTOR 2SA1162-G	
Q196	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q197	8-729-216-22	TRANSISTOR 2SA1162-G	
Q198	8-729-216-22	TRANSISTOR 2SA1162-G	
Q199	8-729-216-22	TRANSISTOR 2SA1162-G	
Q200	8-729-901-06	TRANSISTOR DTA144EK	(PVM-8042Q, 8045Q, 9042QM, 9045QM)
Q201	8-729-216-22	TRANSISTOR 2SA1162-G	
Q202	8-729-216-22	TRANSISTOR 2SA1162-G	
Q203	8-729-216-22	TRANSISTOR 2SA1162-G	
Q204	8-729-216-22	TRANSISTOR 2SA1162-G	
Q205	8-729-216-22	TRANSISTOR 2SA1162-G	
Q206	8-729-216-22	TRANSISTOR 2SA1162-G	
Q208	8-729-216-22	TRANSISTOR 2SA1162-G	
Q209	8-729-255-12	TRANSISTOR 2SC2551-O	
Q210	8-729-255-12	TRANSISTOR 2SC2551-O	
Q211	8-729-255-12	TRANSISTOR 2SC2551-O	
Q212	8-729-141-53	TRANSISTOR 2SK94-X2X3X4	
Q299	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1400	8-729-141-53	TRANSISTOR 2SK94-X2X3X4	
Q1401	8-729-141-53	TRANSISTOR 2SK94-X2X3X4	

<RESISTOR>

Ref.No.	Part No.	Description			Remark
R101	1-216-089-91	RES,CHIP	47K	5%	1/10W
R102	1-216-025-91	RES,CHIP	100	5%	1/10W
R103	1-216-091-00	RES,CHIP	56K	5%	1/10W
R104	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R105	1-216-025-91	RES,CHIP	100	5%	1/10W
R106	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R107	1-216-025-91	RES,CHIP	100	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R108	1-216-113-00	RES,CHIP	470K	5%	1/10W
R109	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R110	1-216-049-91	RES,CHIP	1K	5%	1/10W
R111	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R112	1-216-049-91	RES,CHIP	1K	5%	1/10W
R113	1-249-401-11	CARBON	47	5%	1/4W F
R114	1-216-045-00	RES,CHIP	680	5%	1/10W
R115	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R117	1-216-073-00	RES,CHIP	10K	5%	1/10W
R118	1-216-025-91	RES,CHIP	100	5%	1/10W
R119	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R120	1-216-647-11	METAL CHIP	680	0.50%	1/10W
R121	1-216-025-91	RES,CHIP	100	5%	1/10W
R122	1-216-083-00	RES,CHIP	27K	5%	1/10W
R123	1-216-073-00	RES,CHIP	10K	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R124	1-216-073-00	RES,CHIP	10K	5%	1/10W
R125	1-216-083-00	RES,CHIP	27K	5%	1/10W
R126	1-216-093-00	RES,CHIP	68K	5%	1/10W
R127	1-216-037-00	RES,CHIP	330	5%	1/10W
R128	1-216-083-00	RES,CHIP	27K	5%	1/10W
R129	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R130	1-216-097-91	RES,CHIP	100K	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R131	1-216-089-91	RES,CHIP	47K	5%	1/10W
R132	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R133	1-216-079-00	RES,CHIP	18K	5%	1/10W
R134	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R135	1-216-645-11	METAL CHIP	560	0.50%	1/10W
R136	1-216-091-00	RES,CHIP	56K	5%	1/10W
R137	1-216-045-00	RES,CHIP	680	5%	1/10W
R138	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R139	1-216-079-00	RES,CHIP	18K	5%	1/10W
R140	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R141	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R142	1-216-073-00	RES,CHIP	10K	5%	1/10W
R143	1-216-085-00	RES,CHIP	33K	5%	1/10W
R145	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R146	1-216-037-00	RES,CHIP	330	5%	1/10W
R147	1-216-089-91	RES,CHIP	47K	5%	1/10W
R148	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R155	1-216-655-11	METAL CHIP	1.5K	0.50%	1/10W
R157	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R158	1-216-677-11	METAL CHIP	12K	0.50%	1/10W
R160	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R161	1-216-089-91	RES,CHIP	47K	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R163	1-216-073-00	RES,CHIP	10K	5%	1/10W
R164	1-216-677-11	METAL CHIP	12K	0.50%	1/10W

Ref.No.	Part No.	Description			Remark
R165	1-216-107-00	RES,CHIP	270K	5%	1/10W
R166	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R167	1-216-635-11	METAL CHIP	220	0.50%	1/10W
R168	1-216-103-00	RES,CHIP	180K	5%	1/10W
R169	1-216-033-00	RES,CHIP	220	5%	1/10W
R170	1-216-089-91	RES,CHIP	47K	5%	1/10W
R171	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R172	1-216-043-91	RES,CHIP	560	5%	1/10W
R173	1-216-093-00	RES,CHIP	68K	5%	1/10W
R174	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R175	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R176	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R177	1-216-073-00	RES,CHIP	10K	5%	1/10W
R178	1-216-089-91	RES,CHIP	47K	5%	1/10W
R179	1-216-081-00	RES,CHIP	22K	5%	1/10W
R180	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R181	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R182	1-216-682-11	METAL CHIP	20K	0.50%	1/10W
		(PVM-8042Q, 8045QM, 9042QM, 9045QM)			
R182	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
					(PVM-9045PM)
R183	1-216-691-11	METAL CHIP	47K	0.50%	1/10W
R184	1-218-760-11	METAL CHIP	220K	0.50%	1/10W
R185	1-216-073-00	RES,CHIP	10K	5%	1/10W
R186	1-216-113-00	RES,CHIP	470K	5%	1/10W
R187	1-216-073-00	RES,CHIP	10K	5%	1/10W
R188	1-216-113-00	RES,CHIP	470K	5%	1/10W
R189	1-216-103-00	RES,CHIP	180K	5%	1/10W
R190	1-216-107-00	RES,CHIP	270K	5%	1/10W
R191	1-216-097-91	RES,CHIP	100K	5%	1/10W
R192	1-216-103-00	RES,CHIP	180K	5%	1/10W
R193	1-216-105-91	RES,CHIP	220K	5%	1/10W
R194	1-216-089-91	RES,CHIP	47K	5%	1/10W
R195	1-216-113-00	RES,CHIP	470K	5%	1/10W
R196	1-216-073-00	RES,CHIP	10K	5%	1/10W
R197	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R198	1-216-049-91	RES,CHIP	1K	5%	1/10W
R199	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R200	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R201	1-216-043-91	RES,CHIP	560	5%	1/10W
R202	1-216-033-00	RES,CHIP	220	5%	1/10W
R203	1-216-045-00	RES,CHIP	680	5%	1/10W
R204	1-216-073-00	RES,CHIP	10K	5%	1/10W
R205	1-216-073-00	RES,CHIP	10K	5%	1/10W
R206	1-216-043-91	RES,CHIP	560	5%	1/10W
R207	1-216-045-00	RES,CHIP	680	5%	1/10W
R208	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R209	1-216-043-91	RES,CHIP	560	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R210	1-216-033-00	RES,CHIP	220	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R211	1-216-099-00	RES,CHIP	120K	5%	1/10W
R212	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R213	1-216-043-91	RES,CHIP	560	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R214	1-216-043-91	RES,CHIP	560	5%	1/10W
R215	1-216-127-11	RES,CHIP	1.8M	5%	1/10W
R216	1-216-043-91	RES,CHIP	560	5%	1/10W
R217	1-216-033-00	RES,CHIP	220	5%	1/10W
R218	1-216-295-91	SHORT	0		
R219	1-216-043-91	RES,CHIP	560	5%	1/10W
R220	1-216-043-91	RES,CHIP	560	5%	1/10W
R221	1-216-035-00	RES,CHIP	270	5%	1/10W
R222	1-216-033-00	RES,CHIP	220	5%	1/10W
R223	1-216-073-00	RES,CHIP	10K	5%	1/10W
R224	1-216-073-00	RES,CHIP	10K	5%	1/10W
R225	1-216-095-00	RES,CHIP	82K	5%	1/10W
R226	1-216-073-00	RES,CHIP	10K	5%	1/10W
R227	1-216-035-00	RES,CHIP	270	5%	1/10W
R228	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R229	1-216-113-00	RES,CHIP	470K	5%	1/10W
R230	1-216-081-00	RES,CHIP	22K	5%	1/10W
R231	1-216-113-00	RES,CHIP	470K	5%	1/10W
R232	1-216-105-91	RES,CHIP	220K	5%	1/10W
R233	1-216-073-00	RES,CHIP	10K	5%	1/10W
R234	1-216-041-00	RES,CHIP	470	5%	1/10W
R235	1-216-041-00	RES,CHIP	470	5%	1/10W
R236	1-216-077-00	RES,CHIP	15K	5%	1/10W
R237	1-216-025-91	RES,CHIP	100	5%	1/10W
R238	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R239	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R240	1-216-033-00	RES,CHIP	220	5%	1/10W
R241	1-216-073-00	RES,CHIP	10K	5%	1/10W
R242	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R243	1-216-113-00	RES,CHIP	470K	5%	1/10W
R244	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R245	1-216-679-11	METAL CHIP	15K	0.50%	1/10W
R246	1-216-103-00	RES,CHIP	180K	5%	1/10W
R247	1-216-093-00	RES,CHIP	68K	5%	1/10W
R248	1-216-095-00	RES,CHIP	82K	5%	1/10W
R249	1-216-109-00	RES,CHIP	330K	5%	1/10W
R250	1-216-101-00	RES,CHIP	150K	5%	1/10W
R251	1-216-105-91	RES,CHIP	220K	5%	1/10W
R252	1-216-101-00	RES,CHIP	150K	5%	1/10W
R253	1-216-101-00	RES,CHIP	150K	5%	1/10W
					(PVM-8042Q, 8045Q, 9042QM, 9045QM)
R256	1-216-107-00	RES,CHIP	270K	5%	1/10W
R259	1-216-073-00	RES,CHIP	10K	5%	1/10W
R262	1-216-097-91	RES,CHIP	100K	5%	1/10W
R264	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R266	1-216-073-00	RES,CHIP	10K	5%	1/10W
R268	1-216-081-00	RES,CHIP	22K	5%	1/10W
R269	1-216-103-00	RES,CHIP	180K	5%	1/10W
R270	1-216-081-00	RES,CHIP	22K	5%	1/10W
R271	1-216-025-91	RES,CHIP	100	5%	1/10W
R272	1-216-103-00	RES,CHIP	180K	5%	1/10W
R273	1-216-113-00	RES,CHIP	470K	5%	1/10W
R275	1-216-081-00	RES,CHIP	22K	5%	1/10W
R276	1-216-037-00	RES,CHIP	330	5%	1/10W
R277	1-216-049-91	RES,CHIP	1K	5%	1/10W
R278	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R280	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R281	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R282	1-216-037-00	RES,CHIP	330	5%	1/10W
R283	1-216-049-91	RES,CHIP	1K	5%	1/10W
R284	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R286	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R287	1-216-061-00	RES,CHIP	3.3K	5%	1/10W

B

Ref.No.	Part No.	Description			Remark
R288	1-216-037-00	RES,CHIP	330	5%	1/10W
R289	1-216-049-91	RES,CHIP	1K	5%	1/10W
R290	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R292	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R293	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R295	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R296	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R297	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R298	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R300	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R301	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R302	1-216-113-00	RES,CHIP	470K	5%	1/10W
R303	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R304	1-216-049-91	RES,CHIP	1K	5%	1/10W
R305	1-216-049-91	RES,CHIP	1K	5%	1/10W
R306	1-216-089-91	RES,CHIP	47K	5%	1/10W
R307	1-216-033-00	RES,CHIP	220	5%	1/10W
R308	1-216-089-91	RES,CHIP	47K	5%	1/10W
R309	1-216-089-91	RES,CHIP	47K	5%	1/10W
R310	1-216-033-00	RES,CHIP	220	5%	1/10W
R311	1-216-089-91	RES,CHIP	47K	5%	1/10W
R312	1-216-089-91	RES,CHIP	47K	5%	1/10W
R313	1-216-033-00	RES,CHIP	220	5%	1/10W
R314	1-216-089-91	RES,CHIP	47K	5%	1/10W
R315	1-216-113-00	RES,CHIP	470K	5%	1/10W
R316	1-216-105-91	RES,CHIP	220K	5%	1/10W
R317	1-216-109-00	RES,CHIP	330K	5%	1/10W
R318	1-216-105-91	RES,CHIP	220K	5%	1/10W
R319	1-216-099-00	RES,CHIP	120K	5%	1/10W
R320	1-216-099-00	RES,CHIP	120K	5%	1/10W
R321	1-216-043-91	RES,CHIP	560	5%	1/10W
R322	1-216-109-00	RES,CHIP	330K	5%	1/10W
R323	1-216-109-00	RES,CHIP	330K	5%	1/10W
R324	1-216-109-00	RES,CHIP	330K	5%	1/10W
R325	1-216-097-91	RES,CHIP	100K	5%	1/10W
R326	1-216-113-00	RES,CHIP	470K	5%	1/10W
R328	1-216-073-00	RES,CHIP	10K	5%	1/10W
R329	1-216-107-00	RES,CHIP	270K	5%	1/10W
R330	1-216-105-91	RES,CHIP	220K	5%	1/10W
R331	1-216-025-91	RES,CHIP	100	5%	1/10W
R332	1-216-097-91	RES,CHIP	100K	5%	1/10W
R333	1-216-097-91	RES,CHIP	100K	5%	1/10W
R334	1-216-025-91	RES,CHIP	100	5%	1/10W
R335	1-216-099-00	RES,CHIP	120K	5%	1/10W
R336	1-216-095-00	RES,CHIP	82K	5%	1/10W
R337	1-216-105-91	RES,CHIP	220K	5%	1/10W
R338	1-216-025-91	RES,CHIP	100	5%	1/10W
R339	1-216-099-00	RES,CHIP	120K	5%	1/10W
R340	1-216-095-00	RES,CHIP	82K	5%	1/10W
R341	1-216-105-91	RES,CHIP	220K	5%	1/10W
R342	1-216-047-91	RES,CHIP	820	5%	1/10W
R343	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R344	1-216-664-11	METAL CHIP	3.6K	0.50%	1/10W
R345	1-216-661-11	METAL CHIP	2.7K	0.50%	1/10W
R346	1-216-105-91	RES,CHIP	220K	5%	1/10W
R348	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R349	1-216-650-11	METAL CHIP	910	0.50%	1/10W
R350	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R351	1-216-650-11	METAL CHIP	910	0.50%	1/10W
R352	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R353	1-216-650-11	METAL CHIP	910	0.50%	1/10W
R354	1-216-653-11	METAL CHIP	1.2K	0.50%	1/10W
R355	1-216-113-00	RES,CHIP	470K	5%	1/10W
R356	1-216-113-00	RES,CHIP	470K	5%	1/10W
R357	1-216-095-00	RES,CHIP	82K	5%	1/10W
R358	1-216-113-00	RES,CHIP	470K	5%	1/10W
R359	1-216-081-00	RES,CHIP	22K	5%	1/10W
R360	1-216-089-91	RES,CHIP	47K	5%	1/10W
R363	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R364	1-216-073-00	RES,CHIP	10K	5%	1/10W
R365	1-216-073-00	RES,CHIP	10K	5%	1/10W
R366	1-216-244-00	RES,CHIP	82K	5%	1/8W
R367	1-216-244-00	RES,CHIP	82K	5%	1/8W
R368	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R369	1-216-248-00	RES,CHIP	120K	5%	1/8W
R370	1-216-115-00	RES,CHIP	560K	5%	1/10W
R371	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R372	1-216-115-00	RES,CHIP	560K	5%	1/10W
R374	1-216-115-00	RES,CHIP	560K	5%	1/10W
R375	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R376	1-216-663-11	METAL CHIP	3.3K	0.50%	1/10W
R378	1-216-025-91	RES,CHIP	100	5%	1/10W
R379	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R380	1-216-668-11	METAL CHIP	5.1K	0.50%	1/10W
R381	1-216-089-91	RES,CHIP	47K	5%	1/10W
R382	1-216-025-91	RES,CHIP	100	5%	1/10W
R383	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R384	1-216-668-11	METAL CHIP	5.1K	0.50%	1/10W
R385	1-216-117-00	RES,CHIP	680K	5%	1/10W
R386	1-216-025-91	RES,CHIP	100	5%	1/10W
R387	1-216-641-11	METAL CHIP	390	0.50%	1/10W
R388	1-216-668-11	METAL CHIP	5.1K	0.50%	1/10W
R389	1-216-089-91	RES,CHIP	47K	5%	1/10W (PVM-8042Q, 8045Q, 9042QM, 9045QM)
R390	1-216-105-91	RES,CHIP	220K	5%	1/10W
R391	1-216-081-00	RES,CHIP	22K	5%	1/10W
R392	1-216-113-00	RES,CHIP	470K	5%	1/10W
R393	1-216-085-00	RES,CHIP	33K	5%	1/10W
R394	1-216-113-00	RES,CHIP	470K	5%	1/10W
R397	1-249-437-11	CARBON	47K	5%	1/4W F
R398	1-249-434-11	CARBON	27K	5%	1/4W F
R399	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1001	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1002	1-216-047-91	RES,CHIP	820	5%	1/10W
R1003	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R1004	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1005	1-216-047-91	RES,CHIP	820	5%	1/10W
R1006	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R1007	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1008	1-216-047-91	RES,CHIP	820	5%	1/10W
R1009	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1010	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1011	1-216-033-00	RES,CHIP	220	5%	1/10W
R1012	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1013	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1014	1-216-246-00	RES,CHIP	100K	5%	1/8W
R1015	1-216-033-00	RES,CHIP	220	5%	1/10W

Ref.No.	Part No.	Description			Remark
R1016	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1017	1-216-045-00	RES,CHIP	680	5%	1/10W
R1018	1-216-043-91	RES,CHIP	560	5%	1/10W
R1019	1-216-033-00	RES,CHIP	220	5%	1/10W
R1020	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1021	1-216-045-00	RES,CHIP	680	5%	1/10W
R1022	1-216-025-91	RES,CHIP	100	5%	1/10W
R1023	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1024	1-216-025-91	RES,CHIP	100	5%	1/10W
R1025	1-216-033-00	RES,CHIP	220	5%	1/10W
R1026	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1027	1-216-101-00	RES,CHIP	150K	5%	1/10W
R1028	1-216-033-00	RES,CHIP	220	5%	1/10W
R1029	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1030	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1031	1-216-033-00	RES,CHIP	220	5%	1/10W
R1032	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1033	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1035	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1036	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1038	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1040	1-216-025-91	RES,CHIP	100	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R1042	1-216-047-91	RES,CHIP	820	5%	1/10W
R1043	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R1044	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R1045	1-216-125-00	RES,CHIP	1.5M	5%	1/10W
R1046	1-216-689-11	METAL CHIP	39K	0.50%	1/10W
R1047	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1048	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1049	1-216-085-00	RES,CHIP	33K	5%	1/10W
R1050	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1051	1-216-105-91	RES,CHIP	220K	5%	1/10W
R1053	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1054	1-216-093-00	RES,CHIP	68K	5%	1/10W
R1055	1-216-097-91	RES,CHIP	100K	5%	1/10W
				(PVM-9045PM)	
R1056	1-216-037-00	RES,CHIP	330	5%	1/10W
R1057	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1058	1-216-109-00	RES,CHIP	330K	5%	1/10W
R1059	1-216-109-00	RES,CHIP	330K	5%	1/10W
R1060	1-216-109-00	RES,CHIP	330K	5%	1/10W
R1061	1-216-109-00	RES,CHIP	330K	5%	1/10W
R1062	1-216-103-00	RES,CHIP	180K	5%	1/10W
R1063	1-216-103-00	RES,CHIP	180K	5%	1/10W
R1064	1-216-103-00	RES,CHIP	180K	5%	1/10W
R1065	1-216-103-00	RES,CHIP	180K	5%	1/10W
R1066	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1067	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1068	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1069	1-216-133-00	RES,CHIP	3.3M	5%	1/10W
R1070	1-216-085-00	RES,CHIP	33K	5%	1/10W
R1071	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1072	1-216-099-00	RES,CHIP	120K	5%	1/10W
R1073	1-216-131-11	RES,CHIP	2.7M	5%	1/10W
R1075	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1076	1-216-101-00	RES,CHIP	150K	5%	1/10W

Ref.No.	Part No.	Description			Remark
R1077	1-216-103-00	RES,CHIP	180K	5%	1/10W
R1079	1-216-131-11	RES,CHIP	2.7M	5%	1/10W
R1080	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1081	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1082	1-216-105-91	RES,CHIP	220K	5%	1/10W
R1083	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1084	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R1086	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1087	1-216-121-91	RES,CHIP	1M	5%	1/10W
R1088	1-216-047-91	RES,CHIP	820	5%	1/10W
R1090	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1091	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1092	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1093	1-216-121-91	RES,CHIP	1M	5%	1/10W
R1094	1-216-075-00	RES,CHIP	12K	5%	1/10W
R1095	1-216-075-00	RES,CHIP	12K	5%	1/10W
R1096	1-216-075-00	RES,CHIP	12K	5%	1/10W
R1200	1-216-699-11	METAL CHIP	100K	0.50%	1/10W
R1201	1-218-754-11	METAL CHIP	120K	0.50%	1/10W
R1207	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1208	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1220	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R1221	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R1222	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R1223	1-216-689-11	RES,CHIP	39K	5%	1/10W
R1225	1-215-876-00	METAL OXIDE	15K	5%	1W F
R1226	1-215-876-00	METAL OXIDE	15K	5%	1W F
R1227	1-215-876-00	METAL OXIDE	15K	5%	1W F
R1228	1-249-421-11	CARBON	2.2K	5%	1/4W F
R1229	1-249-421-11	CARBON	2.2K	5%	1/4W F
R1230	1-249-421-11	CARBON	2.2K	5%	1/4W F
R1231	1-216-029-00	RES,CHIP	150	5%	1/10W
R1232	1-216-029-00	RES,CHIP	150	5%	1/10W
R1233	1-216-029-00	RES,CHIP	150	5%	1/10W
R1234	1-216-029-00	RES,CHIP	150	5%	1/10W
R1235	1-216-029-00	RES,CHIP	150	5%	1/10W
R1236	1-216-029-00	RES,CHIP	150	5%	1/10W
R1237	1-249-419-11	CARBON	1.5K	5%	1/4W F
R1238	1-249-419-11	CARBON	1.5K	5%	1/4W F
R1239	1-249-419-11	CARBON	1.5K	5%	1/4W F
R1270	1-216-079-00	RES,CHIP	18K	5%	1/10W
R1271	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1280	1-216-109-00	RES,CHIP	330K	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R1285	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
					(PVM-9045M)
R1288	1-216-105-91	RES,CHIP	220K	5%	1/10W
R1290	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R1291	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1294	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1295	1-216-109-00	RES,CHIP	330K	5%	1/10W
R1296	1-216-095-00	RES,CHIP	82K	5%	1/10W
R1297	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R1298	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R1299	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R1300	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1301	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1302	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1303	1-216-113-00	RES,CHIP	470K	5%	1/10W

B

Ref.No.	Part No.	Description			Remark
R1304	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1305	1-216-093-00	RES,CHIP	68K	5%	1/10W
R1306	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R1307	1-216-041-00	RES,CHIP	470	5%	1/10W
R1308	1-216-041-00	RES,CHIP	470	5%	1/10W
R1309	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R1310	1-216-119-00	RES,CHIP	820K	5%	1/10W
R1313	1-216-101-00	RES,CHIP	150K	5%	1/10W
		(PVM-8042Q, 8045QM, 9042QM, 9045QM)			
R1313	1-216-099-00	RES,CHIP	120K	5%	1/10W
					(PVM-9045PM)
R1314	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1315	1-216-077-00	RES,CHIP	15K	5%	1/10W
R1320	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1321	1-216-093-00	RES,CHIP	68K	5%	1/10W
R1322	1-216-037-00	RES,CHIP	330	5%	1/10W
R1323	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1324	1-216-121-91	RES,CHIP	1M	5%	1/10W
R1325	1-216-085-00	RES,CHIP	33K	5%	1/10W
R1326	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1327	1-216-099-00	RES,CHIP	120K	5%	1/10W
R1328	1-216-099-00	RES,CHIP	120K	5%	1/10W
R1329	1-216-093-00	RES,CHIP	68K	5%	1/10W
R1330	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R1331	1-216-051-00	RES,CHIP	1.2K	5%	1/10W
R1332	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1333	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1334	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R1335	1-216-035-00	RES,CHIP	270	5%	1/10W
R1336	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1337	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1338	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1339	1-216-097-91	RES,CHIP	100K	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R1340	1-216-097-91	RES,CHIP	100K	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R1341	1-216-111-00	RES,CHIP	390K	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R1342	1-216-694-11	METAL CHIP	62K	0.50%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R1343	1-216-121-91	RES,CHIP	1M	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R1344	1-216-073-00	RES,CHIP	10K	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R1345	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R1346	1-216-047-91	RES,CHIP	820	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R1347	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1348	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1349	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1350	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1351	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1352	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1353	1-216-115-00	RES,CHIP	560K	5%	1/10W
R1371	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1372	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1373	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1392	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1393	1-216-095-00	RES,CHIP	82K	5%	1/10W
R1394	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1395	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1396	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1397	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1401	1-216-111-00	RES,CHIP	390K	5%	1/10W
R1402	1-216-689-11	RES,CHIP	39K	5%	1/10W
R1403	1-216-083-00	RES,CHIP	27K	5%	1/10W
R1404	1-216-689-11	RES,CHIP	39K	5%	1/10W
R1405	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
		(PVM-8042Q, 9045QM, 9042QM, 9045QM)			
R1405	1-216-073-00	RES,CHIP	5.6K	5%	1/10W
					(PVM-9045PM)
R1406	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
		(PVM-8042Q, 9045QM, 9042QM, 9045QM)			
R1406	1-216-073-00	RES,CHIP	5.6K	5%	1/10W
					(PVM-9045PM)
R1407	1-216-029-00	RES,CHIP	150	5%	1/10W
R1408	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
		(PVM-8042Q, 9045QM, 9042QM, 9045QM)			
R1408	1-216-049-91	RES,CHIP	1K	5%	1/10W
					(PVM-9045PM)
R1409	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
		(PVM-8042Q, 9045QM, 9042QM, 9045QM)			
R1409	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1410	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1411	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1412	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1413	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1414	1-216-111-00	RES,CHIP	390K	5%	1/10W

<VARIABLE RESISTOR>

RV101	1-241-763-11	RES, ADJ, CERMET 4.7K
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)
RV102	1-241-763-11	RES, ADJ, CERMET 4.7K
RV103	1-241-759-11	RES, ADJ, CARBON 220
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)
RV104	1-241-759-11	RES, ADJ, CARBON 220
RV105	1-241-761-11	RES, ADJ, CARBON 1K
RV106	1-241-761-11	RES, ADJ, CARBON 1K
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)
RV107	1-241-761-11	RES, ADJ, CARBON 1K
RV108	1-241-764-11	RES, ADJ, CARBON 10K
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)
RV109	1-241-765-11	RES, ADJ, CERMET 22K
RV110	1-241-764-11	RES, ADJ, CARBON 10K
RV111	1-241-764-11	RES, ADJ, CARBON 10K
RV112	1-238-019-11	RES, ADJ, CARBON 47K
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)
RV113	1-238-019-11	RES, ADJ, CARBON 47K
RV114	1-238-019-11	RES, ADJ, CARBON 47K
RV115	1-241-765-11	RES, ADJ, CARBON 22K
RV116	1-241-765-11	RES, ADJ, CARBON 22K
RV118	1-241-765-11	RES, ADJ, CARBON 22K
RV119	1-241-765-11	RES, ADJ, CARBON 22K
RV120	1-241-765-11	RES, ADJ, CARBON 22K
RV121	1-241-765-11	RES, ADJ, CARBON 22K
RV122	1-241-765-11	RES, ADJ, CARBON 22K
RV123	1-241-762-11	RES, ADJ, CARBON 2.2K
RV124	1-241-761-11	RES, ADJ, CARBON 1K
RV125	1-241-761-11	RES, ADJ, CARBON 1K

Ref.No.	Part No.	Description			Remark
RV205	1-241-765-11	RES, ADJ, CARBON 22K			
RV1400	1-237-036-11	RES, ADJ, CERMET 10K			
RV1401	1-237-036-11	RES, ADJ, CERMET 10K			
		<MODULE>			
SEP101	1-808-654-11	MODULE (PVM-8042Q, 8045Q, 9042QM, 9045QM)			
SEP101	1-809-347-11	MODULE (PVM-9045PM)			
		<CRYSTAL>			
X1400	1-527-722-00	VIBRATOR, CRYSTAL			
X1401	1-527-523-00	OSCILLATOR CRYSTAL (PVM-9045PM)			
X1401	1-577-259-11	VIBRATOR, CRYSTAL (PVM-8042Q, 8045Q, 9042QM, 9045QM)			
**********					
	* A-1190-333-A	MOUNTED PWB, PA **********			
		<CAPACITOR>			
C815	1-126-964-11	ELECT	10µF	20%	50V
C816	1-117-228-11	FILM	2.2µF	10%	450V
C817	1-117-228-11	FILM	2.2µF	10%	450V
		<CONNECTOR>			
CN806	1-695-915-11	TAB (CONTACT)			
CN807	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN808	* 1-564-506-11	PLUG, CONNECTOR 3P			
CN809	* 1-560-123-00	PLUG, CONNECTOR (2.5MM) 3P			
		<DIODE>			
D815	8-719-911-19	DIODE 1SS119-25			
		<TRANSISTOR>			
Q815	8-729-906-24	TRANSISTOR 2SD835			
Q816	8-729-140-96	TRANSISTOR 2SD774-34			
		<RESISTOR>			
R815	1-215-929-11	METAL OXIDE	100K	5%	3W F
R816	1-249-429-11	CARBON	10K	5%	1/4W
R817	1-247-843-11	CARBON	3.3K	5%	1/4W
R818	1-202-846-00	SOLID	470K	10%	1/2W
		<RELAY>			
RY815	1-515-738-11	RELAY			

Ref.No.	Part No.	Description			
**********					
	* A-1195-146-A	P BOARD, COMPETE **********			
	* 4-043-154-01	HOLDER, IC			
	4-382-854-01	SCREW (M3X8), P, SW (+)			
	4-879-937-00	SHEET, MICA			
		<CAPACITOR>			
C801	1-126-971-11	ELECT	470µF	20%	35V
C802	1-102-228-00	CERAMIC	470PF	10%	500V
C803	1-102-228-00	CERAMIC	470PF	10%	500V
C804	1-107-638-11	ELECT	33µF	20%	160V
C806	1-124-480-11	ELECT	470µF	20%	25V
C807	1-102-228-00	CERAMIC	470PF	10%	500V
C808	1-137-150-11	MYLAR	0.01µF	10%	100V
C809	1-106-375-12	MYLAR	0.022µF	10%	100V
C810	1-162-318-11	CERAMIC	0.001µF	10%	500V
C811	⚠1-137-544-11	FILM	0.01µF	3%	600V
C812	⚠1-137-545-11	FILM	0.013µF	3%	600V
C813	1-107-385-11	MYLAR	0.056µF	5%	200V
C814	1-137-353-11	MYLAR	0.047µF	10%	100V
C815	1-124-910-11	ELECT	47µF	20%	50V
C816	1-107-675-11	ELECT	1µF	20%	160V
C818	1-102-228-00	CERAMIC	470PF	10%	500V
C819	1-162-116-00	CERAMIC	680PF	10%	2KV
C820	1-162-116-00	CERAMIC	680PF	10%	2KV
C821	1-162-116-00	CERAMIC	680PF	10%	2KV
C825	1-123-024-21	ELECT	33µF		160V
C880	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C883	1-129-720-00	FILM	0.033µF	5%	630V
		<CONNECTOR>			
CN801	* 1-564-595-11	PLUG, CONNECTOR 14P			
CN802	* 1-508-766-00	PIN, CONNECTOR (5MM PITCH) 4P			
CN803	* 1-564-508-11	PLUG, CONNECTOR 5P			
CN810	1-695-915-11	TAB (CONTACT)			
CN811	* 1-564-506-11	PLUG, CONNECTOR 3P			
		<DIODE>			
D801	8-719-302-43	DIODE EL1Z			
D802	8-719-302-43	DIODE EL1Z			
D803	8-719-302-43	DIODE EL1Z			
D804	8-719-979-85	DIODE EGP20G			
D805	8-719-302-43	DIODE EL1Z			
D806	8-719-302-43	DIODE EL1Z			
D808	8-719-018-72	THYRISTOR CR02AM-4TB			
D809	8-719-908-03	DIODE GP08D			
D810	8-719-908-03	DIODE GP08D			
D811	8-719-908-03	DIODE GP08D			
D813	8-719-302-43	DIODE EL1Z			
D814	8-719-901-19	DIODE V11N			
		<COIL>			
L802	1-459-442-00	INDUCTOR	15µH		

P FA QA

Ref.No.	Part No.	Description				Remark
L803	1-422-613-11	COIL, AIR CORE 0.68µH				
L805	⚠1-460-225-11	COIL, HORIZONTAL LINEARITY 48.80				
L807	1-406-987-21	INDUCTOR	4.7mH			
L810	1-412-529-11	INDUCTOR	22µH			
		<NEON LAMP>				
NL801	1-519-108-99	LAMP, NEON				
		<TRANSISTOR>				
Q801	8-729-195-82	TRANSISTOR 2SC2958-L				
Q802	8-729-201-62	TRANSISTOR 2SC2555-2				
		<RESISTOR>				
R801	1-249-383-11	CARBON	1.5	5%	1/4W	F
R802	1-249-377-11	CARBON	0.47	5%	1/4W	F
R803	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R804	1-249-419-11	CARBON	1.5K	5%	1/4W	F
R805	1-215-892-11	METAL OXIDE	1K	5%	2W	F
R807	1-216-425-11	METAL OXIDE	56	5%	1W	F
R808	1-202-846-00	SOLID	470K	20%	1/2W	
R809	1-216-089-91	RES,CHIP	47K	5%	1/10W	
R810	1-249-421-11	CARBON	2.2K	5%	1/4W	F
R811	1-216-049-91	RES,CHIP	1K	5%	1/10W	
R813	1-249-414-11	CARBON	560	5%	1/4W	F
R814	1-249-377-11	CARBON	0.47	5%	1/4W	F
R817	1-216-065-91	RES,CHIP	4.7K	5%	1/10W	
		<VARIABLE RESISTOR>				
RV801	1-223-102-00	RES, ADJ, WIREWOUND 120				
		<TRANSFORMER>				
T801	1-437-082-31	HDT				
T802	⚠1-439-526-12	TRANSFORMER ASSY, FLYBACK				
		**********				
	* A-1241-055-A	MOUNTED PWB, FA (PVM-8042Q, 8045Q, 9045PM)				
	* A-1241-070-A	MOUNTED PWB, FA (PVM-9042QM, 9045QM)				
		**********				
	1-533-223-11	CLIP, FUSE				
	* 1-641-723-11	PC BOARD, FA				
		<CAPACITOR>				
C601	⚠1-136-889-11	FILM	0.22µF	20%	250V	
		<CONNECTOR>				
CN601	* 1-580-689-11	PIN, CONNECTOR (PC BOARD) 4P				
CN602	* 1-508-765-00	PIN, CONNECTOR (5MM PITCH) 3P				
CN603	* 1-564-507-11	PLUG, CONNECTOR 4P				
		<FUSE>				
F601	⚠1-532-745-11	FUSE, GLASS TUBE 3.15A/125V (PVM-8042Q, 8045Q, 9045PM)				
F601	⚠1-576-230-11	FUSE (H.B.C) 3.15A/250V (PVM-9042QM, PVM-9045QM)				
		<RESISTOR>				
R602	⚠1-202-887-91	SOLID	1.5M	20%	1/2W	
		<SWITCH>				
S601	⚠1-692-049-11	SWITCH, PUSH (AC POWER) (1KEY) (3.0A/250V) (PVM-8042Q, 8045Q, 9045PM)				
S601	⚠1-692-050-11	SWITCH, PUSH (AC POWER) (1KEY) (PVM-9042QM, 9045QM)				
		**********				
	* A-1275-162-A	QA COMPLETE **********				
	1-537-408-21	TERMINAL BOARD, INPUT/OUTPUT				
	1-537-410-11	TERMINAL BOARD, INPUT/OUTPUT				
		<CAPACITOR>				
C401	1-126-514-11	ELECT	22µF	20%	16V	
C402	1-126-514-11	ELECT	22µF	20%	16V	
C403	1-126-514-11	ELECT	22µF	20%	16V	
C404	1-126-514-11	ELECT	22µF	20%	16V	
C405	1-126-514-11	ELECT	22µF	20%	16V	
C406	1-126-514-11	ELECT	22µF	20%	16V	
C407	1-126-514-11	ELECT	22µF	20%	16V	
C408	1-115-867-11	ELECT	0.1µF	20%	50V	
C409	1-126-514-11	ELECT	22µF	20%	16V	
C410	1-126-514-11	ELECT	22µF	20%	16V	
C411	1-126-514-11	ELECT	22µF	20%	16V	
C412	1-126-514-11	ELECT	22µF	20%	16V	
C413	1-126-514-11	ELECT	22µF	20%	16V	
C414	1-126-791-11	ELECT	10µF	20%	16V	
C415	1-126-791-11	ELECT	10µF	20%	16V	
C416	1-126-791-11	ELECT	10µF	20%	16V	
C417	1-126-791-11	ELECT	10µF	20%	16V	
C418	1-126-791-11	ELECT	10µF	20%	16V	
C419	1-126-791-11	ELECT	10µF	20%	16V	
C420	1-126-791-11	ELECT	10µF	20%	16V	
C421	1-102-125-00	CERAMIC	0.0047µF	10%	50V	
C422	1-115-868-11	ELECT	0.22µF	20%	50V	
C423	1-126-791-11	ELECT	10µF	20%	16V	
C424	1-126-791-11	ELECT	10µF	20%	16V	
C425	1-137-397-11	FILM	0.047µF	5%	100V	
C426	1-128-499-11	ELECT	220µF	20%	16V	
C427	1-128-499-11	ELECT	220µF	20%	16V	
C428	1-107-909-11	ELECT	47µF	20%	16V	
C429	1-126-514-11	ELECT	22µF	20%	16V	
C430	1-163-033-91	CERAMIC CHIP	0.022µF		50V	

Ref.No.	Part No.	Description			Remark
C431	1-126-514-11	ELECT	22µF	20%	16V
C432	1-163-033-91	CERAMIC CHIP	0.022µF		50V
C433	1-126-514-11	ELECT	22µF	20%	16V
C434	1-163-033-91	CERAMIC CHIP	0.022µF		50V
C435	1-126-514-11	ELECT	22µF	20%	16V
C436	1-163-033-91	CERAMIC CHIP	0.022µF		50V
C437	1-163-033-91	CERAMIC CHIP	0.022µF		50V
C438	1-126-514-11	ELECT	22µF	20%	16V
C439	1-163-033-91	CERAMIC CHIP	0.022µF		50V
C440	1-163-033-91	CERAMIC CHIP	0.022µF		50V
C441	1-126-514-11	ELECT	22µF	20%	16V
C442	1-163-033-91	CERAMIC CHIP	0.022µF		50V
C443	1-163-033-91	CERAMIC CHIP	0.022µF		50V
C444	1-163-033-91	CERAMIC CHIP	0.022µF		50V
C445	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C446	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C447	1-115-871-11	ELECT	1µF	20%	50V
C448	1-126-514-11	ELECT	22µF	20%	16V
C449	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C450	1-126-514-11	ELECT	22µF	20%	16V
C451	1-163-033-91	CERAMIC CHIP	0.022µF		50V
C452	1-128-126-11	ELECT	100µF	20%	25V
C453	1-126-514-11	ELECT	22µF	20%	16V
C454	1-128-499-11	ELECT	220µF	20%	16V
C460	1-115-871-11	ELECT	1µF	20%	50V
C461	1-115-871-11	ELECT	1µF	20%	50V
C462	1-115-871-11	ELECT	1µF	20%	50V
C464	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C465	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C466	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C467	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C475	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C1401	1-128-126-11	ELECT	100µF	20%	25V
	<CONNECTOR>				
CN401	1-506-494-11	PIN, CONNECTOR 15P			
CN402	* 1-564-518-11	PLUG, CONNECTOR 3P			
CN403	* 1-580-690-11	PIN, CONNECTOR (PC BOARD) 2P			
CN404	* 1-564-520-11	PLUG, CONNECTOR 5P			
	<DIODE>				
D401	8-719-404-49	DIODE MA111			
D402	8-719-404-49	DIODE MA111			
D403	8-719-110-09	DIODE RD8.2ESB3			
D404	8-719-404-49	DIODE MA111			
D405	8-719-404-49	DIODE MA111			
D406	8-719-404-49	DIODE MA111			
D407	8-719-404-49	DIODE MA111			
D408	8-719-404-49	DIODE MA111			
D409	8-719-404-49	DIODE MA111			
D410	8-719-404-49	DIODE MA111			
D411	8-719-404-49	DIODE MA111			
D412	8-719-404-49	DIODE MA111			
D413	8-719-404-49	DIODE MA111			
D414	8-719-404-49	DIODE MA111			
D415	8-719-404-49	DIODE MA111			
D416	8-719-404-49	DIODE MA111			
D417	8-719-404-49	DIODE MA111			
D418	8-719-404-49	DIODE MA111			
D419	8-719-404-49	DIODE MA111			
D420	8-719-404-49	DIODE MA111			
D421	8-719-404-49	DIODE MA111			
D422	8-719-404-49	DIODE MA111			
D423	8-719-404-49	DIODE MA111			
D424	8-719-404-49	DIODE MA111			
D425	8-719-404-49	DIODE MA111			
D426	8-719-404-49	DIODE MA111			
D427	8-719-404-49	DIODE MA111			
D428	8-719-404-49	DIODE MA111			
D429	8-719-404-49	DIODE MA111			
D430	8-719-404-49	DIODE MA111			
D431	8-719-404-49	DIODE MA111			
	<IC>				
IC401	8-759-446-66	IC MM1113XFBE			
IC402	8-759-446-66	IC MM1113XFBE			
IC403	8-759-420-04	IC AN5265			
	<COIL>				
L401	1-410-682-31	INDUCTOR 470µH			
L402	1-410-682-31	INDUCTOR 470µH			
	<TRANSISTOR>				
Q401	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q402	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q403	8-729-216-22	TRANSISTOR 2SA1162-G			
Q404	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q405	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q406	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q407	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q408	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q409	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q410	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q411	8-729-216-22	TRANSISTOR 2SA1162-G			
Q412	8-729-216-22	TRANSISTOR 2SA1162-G			
Q413	8-729-216-22	TRANSISTOR 2SA1162-G			
Q414	8-729-216-22	TRANSISTOR 2SA1162-G			
Q416	8-729-106-68	TRANSISTOR 2SD1615A-GP			
Q417	8-729-901-06	TRANSISTOR DTA144EK			
Q418	8-729-901-06	TRANSISTOR DTA144EK			
Q419	8-729-901-06	TRANSISTOR DTA144EK			
Q421	8-729-901-06	TRANSISTOR DTA144EK			
Q422	1-801-806-11	TRANSISTOR DTC144EK-T147			
Q423	8-729-901-06	TRANSISTOR DTA144EK			
Q424	8-729-901-06	TRANSISTOR DTA144EK			
Q1401	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q1403	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q1404	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1405	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1406	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1407	8-729-120-28	TRANSISTOR 2SC1623-L5L6			

QA

Ref.No.	Part No.	Description			Remark
	<RESISTOR>				
R401	1-214-702-00	METAL	75	1%	1/4W
R402	1-216-049-91	RES,CHIP	1K	5%	1/10W
R403	1-216-093-00	RES,CHIP	68K	5%	1/10W
R404	1-216-091-00	RES,CHIP	56K	5%	1/10W
R405	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R406	1-216-037-00	RES,CHIP	330	5%	1/10W
R407	1-216-689-11	RES,CHIP	39K	5%	1/10W
R408	1-216-085-00	RES,CHIP	33K	5%	1/10W
R409	1-214-702-00	METAL	75	1%	1/4W
R410	1-216-049-91	RES,CHIP	1K	5%	1/10W
R411	1-216-093-00	RES,CHIP	68K	5%	1/10W
R412	1-216-091-00	RES,CHIP	56K	5%	1/10W
R413	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R414	1-216-037-00	RES,CHIP	330	5%	1/10W
R415	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R416	1-216-023-00	RES,CHIP	82	5%	1/10W
R417	1-216-049-91	RES,CHIP	1K	5%	1/10W
R418	1-216-093-00	RES,CHIP	68K	5%	1/10W
R419	1-216-091-00	RES,CHIP	56K	5%	1/10W
R420	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R421	1-216-027-00	RES,CHIP	120	5%	1/10W
R422	1-214-702-00	METAL	75	1%	1/4W
R423	1-214-702-00	METAL	75	1%	1/4W
R424	1-216-049-91	RES,CHIP	1K	5%	1/10W
R425	1-216-093-00	RES,CHIP	68K	5%	1/10W
R426	1-216-091-00	RES,CHIP	56K	5%	1/10W
R427	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R428	1-216-037-00	RES,CHIP	330	5%	1/10W
R429	1-214-702-00	METAL	75	1%	1/4W
R430	1-216-049-91	RES,CHIP	1K	5%	1/10W
R431	1-216-093-00	RES,CHIP	68K	5%	1/10W
R432	1-216-091-00	RES,CHIP	56K	5%	1/10W
R433	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R434	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R435	1-214-702-00	METAL	75	1%	1/4W
R436	1-216-049-91	RES,CHIP	1K	5%	1/10W
R437	1-216-093-00	RES,CHIP	68K	5%	1/10W
R438	1-216-091-00	RES,CHIP	56K	5%	1/10W
R439	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R440	1-216-027-00	RES,CHIP	120	5%	1/10W
R441	1-216-089-91	RES,CHIP	47K	5%	1/10W
R442	1-216-049-91	RES,CHIP	1K	5%	1/10W
R443	1-216-689-11	RES,CHIP	39K	5%	1/10W
R444	1-214-702-00	METAL	75	1%	1/4W
R445	1-216-049-91	RES,CHIP	1K	5%	1/10W
R446	1-216-093-00	RES,CHIP	68K	5%	1/10W
R447	1-216-091-00	RES,CHIP	56K	5%	1/10W
R448	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R449	1-216-651-11	METAL CHIP	1K	0.50%	1/10W
R450	1-214-702-00	METAL	75	1%	1/4W
R451	1-216-049-91	RES,CHIP	1K	5%	1/10W
R452	1-216-091-00	RES,CHIP	56K	5%	1/10W
R453	1-216-093-00	RES,CHIP	68K	5%	1/10W
R454	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R455	1-216-037-00	RES,CHIP	330	5%	1/10W
R456	1-216-085-00	RES,CHIP	33K	5%	1/10W
R457	1-216-085-00	RES,CHIP	33K	5%	1/10W
R458	1-247-707-11	CARBON	390	5%	1/4W
R459	1-216-689-11	RES,CHIP	39K	5%	1/10W
R460	1-216-089-91	RES,CHIP	47K	5%	1/10W
R461	1-216-097-91	RES,CHIP	100K	5%	1/10W
R462	1-216-115-00	RES,CHIP	560K	5%	1/10W
R463	1-216-105-91	RES,CHIP	220K	5%	1/10W
R464	1-216-077-00	RES,CHIP	15K	5%	1/10W
R465	1-216-025-91	RES,CHIP	100	5%	1/10W
R466	1-216-097-91	RES,CHIP	100K	5%	1/10W
R467	1-216-115-00	RES,CHIP	560K	5%	1/10W
R468	1-216-105-91	RES,CHIP	220K	5%	1/10W
R469	1-216-077-00	RES,CHIP	15K	5%	1/10W
R470	1-216-025-91	RES,CHIP	100	5%	1/10W
R471	1-216-097-91	RES,CHIP	100K	5%	1/10W
R472	1-216-115-00	RES,CHIP	560K	5%	1/10W
R473	1-216-105-91	RES,CHIP	220K	5%	1/10W
R474	1-216-077-00	RES,CHIP	15K	5%	1/10W
R475	1-216-025-91	RES,CHIP	100	5%	1/10W
R477	1-216-081-00	RES,CHIP	22K	5%	1/10W
R479	1-216-085-00	RES,CHIP	33K	5%	1/10W
R480	1-247-711-11	CARBON	680	5%	1/4W
R481	1-247-720-11	CARBON	3.9K	5%	1/4W
R482	1-249-455-11	CARBON	4.7	5%	1/4W
R483	1-249-389-11	CARBON	4.7	5%	1/4W F
R484	1-216-049-91	RES,CHIP	1K	5%	1/10W
R485	1-247-688-11	CARBON	10	5%	1/4W F
R486	1-216-037-00	RES,CHIP	330	5%	1/10W
R487	1-249-468-11	CARBON	82K	5%	1/4W
R488	1-249-468-11	CARBON	82K	5%	1/4W
R489	1-249-468-11	CARBON	82K	5%	1/4W
R490	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R491	1-216-089-91	RES,CHIP	47K	5%	1/10W
R492	1-216-089-91	RES,CHIP	47K	5%	1/10W
R493	1-216-089-91	RES,CHIP	47K	5%	1/10W
R495	1-216-295-91	SHORT	0		
R496	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R497	1-216-089-91	RES,CHIP	47K	5%	1/10W
R498	1-216-089-91	RES,CHIP	47K	5%	1/10W
R499	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1401	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1403	1-216-295-91	SHORT	0		
R1404	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1410	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1411	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1412	1-216-113-00	RES,CHIP	470K	5%	1/10W
R1413	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1414	1-216-662-11	METAL CHIP	3K	0.50%	1/10W
R1416	1-216-662-11	METAL CHIP	3K	0.50%	1/10W
R1417	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R1418	1-216-027-00	RES,CHIP	120	5%	1/10W
R1419	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R1420	1-216-027-00	RES,CHIP	120	5%	1/10W
R1421	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R1422	1-216-027-00	RES,CHIP	120	5%	1/10W
R1423	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1424	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1425	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1426	1-216-049-91	RES,CHIP	1K	5%	1/10W

Ref.No.	Part No.	Description			Remark
R1427	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1428	1-249-465-11	CARBON	47K	5%	1/4W
R1429	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1430	1-216-049-91	RES,CHIP	1K	5%	1/10W
		<VARIABLE RESISTOR>			
RV401	1-237-994-11	RES, VAR, CARBON 20K			
		<SWITCH>			
S401	1-570-145-11	SWITCH, SLIDE			
**********					
	* A-1331-183-B	MOUNTED PWB, CA			
		**********			
	1-251-244-11	SOCKET, CRT			
	1-641-720-11	PC BOARD, CA			
	* 4-376-132-11	COVER (REAR LID), CV VOL			
	* 4-376-133-11	COVER (MAIN), CV VOL			
		<CAPACITOR>			
C701	1-162-114-00	CERAMIC	0.0047µF	10%	2KV
C710	1-161-830-00	CERAMIC	0.0047µF	99%	500V
		<CONNECTOR>			
CN701	* 1-564-509-11	PLUG, CONNECTOR 6P			
CN702	* 1-508-784-00	PIN, CONNECTOR (5MM PITCH) 1P			
CN703	* 1-564-508-11	PLUG, CONNECTOR 5P			
		<COIL>			
L701	1-410-668-11	INDUCTOR 27µH			
		<RESISTOR>			
R701	1-202-822-00	SOLID	2.2K	20%	1/2W
R702	1-202-822-00	SOLID	2.2K	20%	1/2W
R703	1-202-822-00	SOLID	2.2K	20%	1/2W
R704	1-202-838-00	SOLID	100K	20%	1/2W
R706	1-202-842-11	SOLID	220K	20%	1/2W
R707	1-202-838-00	SOLID	100K	10%	1/2W
		<VARIABLE RESISTOR>			
RV701	1-230-164-00	RES, ADJ, METAL GLAZE 55M			
**********					
	* A-1346-787-A	D BOARD, COMPLETE			
		(PVM-8042Q, 8045Q, 9042Q, 9045QM)			
	* A-1346-806-A	D BOARD, COMPLETE (PVM-9045PM)			
		**********			

Ref.No.	Part No.	Description			Remark
	1-533-189-11	HOLDER, FUSE			
	* 3-738-015-01	COVER, (DIA. 6) CARBON VR			
	4-382-854-01	SCREW (M3X8), P, SW (+)			
	4-382-854-11	SCREW (M3X10), P, SW (+)			
		<CAPACITOR>			
C501	1-104-664-11	ELECT	47µF	20%	16V
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
C502	1-126-964-11	ELECT	10µF	20%	50V
C503	1-126-935-11	ELECT	470µF	20%	16V
C504	1-126-959-11	ELECT	0.47µF	20%	50V
C505	1-106-381-12	MYLAR	0.039µF	10%	100V
C506	1-126-960-11	ELECT	1µF	20%	50V
C507	1-137-150-11	MYLAR	0.01µF	10%	100V
C508	1-126-960-11	ELECT	1µF	20%	50V
C509	1-137-194-81	FILM	0.47µF	5%	50V
C510	1-136-161-00	FILM	0.047µF	5%	50V
C511	1-107-902-11	ELECT	1µF	20%	50V
C512	1-106-375-12	MYLAR	0.022µF	10%	100V
C513	1-106-375-12	MYLAR	0.022µF	10%	100V
C514	1-137-350-11	MYLAR	0.015µF	10%	100V
C515	1-126-961-11	ELECT	2.2µF	20%	50V
C516	1-126-961-11	ELECT	2.2µF	20%	50V
C517	1-130-480-00	FILM	0.0056µF	5%	50V
C518	1-163-245-11	CERAMIC CHIP	56PF	5%	50V
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
C519	1-126-963-11	ELECT	4.7µF	20%	50V
C520	1-163-129-00	CERAMIC CHIP	330PF	5%	50V
C521	1-107-906-11	ELECT	10µF	20%	50V
C523	1-106-363-00	MYLAR	0.0068µF	10%	100V
C524	1-102-116-00	CERAMIC	680PF	10%	50V
C525	1-102-820-00	CERAMIC	330PF	5%	50V
C526	1-102-074-00	CERAMIC	0.001µF	10%	50V
C527	1-107-910-11	ELECT	100µF	20%	50V
C528	1-102-125-00	CERAMIC	0.0047µF	10%	50V
C529	1-107-909-11	ELECT	47µF	20%	50V
C530	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C531	1-131-370-00	TANTALUM	6.8µF	10%	16V
C532	1-107-914-11	ELECT	1000µF	20%	25V
C533	1-126-963-11	ELECT	4.7µF	20%	50V
C534	1-107-713-11	ELECT	4.7µF	20%	50V
C535	1-136-161-00	FILM	0.047µF	5%	50V
C536	1-126-963-11	ELECT	4.7µF	20%	50V
C537	1-107-894-11	ELECT	220µF	20%	35V
C538	1-126-967-11	ELECT	47µF	20%	50V
C539	1-136-113-00	FILM	2µF	5%	200V
C540	1-163-017-00	CERAMIC CHIP	0.0047µF	10%	50V
C541	1-163-035-00	CERAMIC CHIP	0.047µF		50V
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
C542	1-126-935-11	ELECT	470µF	20%	16V
C545	1-126-933-11	ELECT	100µF	20%	16V
C546	1-126-964-11	ELECT	10µF	20%	50V
C547	1-126-964-11	ELECT	10µF	20%	50V
C548	1-126-964-11	ELECT	10µF	20%	50V
C549	1-126-964-11	ELECT	10µF	20%	50V
C550	1-126-964-11	ELECT	10µF	20%	50V
C551	1-126-963-11	ELECT	4.7µF	20%	50V
C552	1-101-004-00	CERAMIC	0.01µF		50V
C553	1-126-935-11	ELECT	470µF	20%	16V

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Ref.No.	Part No.	Description			Remark
C563	1-137-353-11	MYLAR	0.047µF	10%	100V
C564	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C567	1-107-906-11	ELECT	10µF	20%	50V
C568	1-130-736-11	FILM	0.01µF	5%	50V
C569	1-136-479-11	FILM	0.001µF	5%	50V
C570	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C571	1-126-971-11	ELECT	470µF	20%	50V
C572	1-101-004-00	CERAMIC	0.01µF		50V
C574	1-136-481-11	MYLAR	0.0022µF	10%	100V
C575	1-136-481-11	MYLAR	0.0022µF	10%	100V
C578	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C831	1-107-906-11	ELECT	10µF	20%	50V
C832	1-107-906-11	ELECT	10µF	20%	50V
C833	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C834	1-163-121-00	CERAMIC CHIP	150PF	5%	50V
C835	1-163-209-00	CERAMIC CHIP	0.0015µF	5%	50V
C836	1-126-964-11	ELECT	10µF	20%	50V
C837	1-163-209-00	CERAMIC CHIP	0.0015µF	5%	50V
C838	1-136-495-11	FILM	0.068µF	5%	50V
C839	1-136-481-11	MYLAR	0.0022µF	10%	100V
C840	1-163-209-00	CERAMIC CHIP	0.0015µF	5%	50V
C841	1-163-209-00	CERAMIC CHIP	0.0015µF	5%	50V
C843	1-107-901-11	ELECT	0.47µF	20%	50V
C844	1-107-901-11	ELECT	0.47µF	20%	50V
C845	1-107-888-11	ELECT	47µF	20%	25V
C846	1-107-906-11	ELECT	10µF	20%	50V
C847	1-126-965-11	ELECT	22µF	20%	50V
C848	1-131-351-00	TANTALUM	4.7µF	10%	35V
C849	1-164-182-11	CERAMIC CHIP	0.0033µF	10%	50V
C1601	1-126-964-11	ELECT	10µF	20%	50V
C1602	1-164-161-11	CERAMIC CHIP	0.0022µF	10%	50V
C1603	1-111-108-11	ELECT	18µF	20%	50V
C1604	1-115-842-11	ELECT	0.001F	20%	50V
C1605	1-126-972-11	ELECT	1000µF	20%	50V
C1606	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C1607	1-126-964-11	ELECT	10µF	20%	50V
C1608	1-126-965-11	ELECT	22µF	20%	50V
C1609	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C1610	1-126-963-11	ELECT	4.7µF	20%	50V
C1611	1-104-668-11	ELECT	33µF	20%	35V
C1612	1-136-257-00	FILM	0.0039µF	5%	50V
C1613	1-163-009-11	CERAMIC CHIP	0.001µF	10%	50V
C1614	1-163-021-91	CERAMIC CHIP	0.01µF	10%	50V
C1615	1-107-901-11	ELECT	0.47µF	20%	50V
C1620	1-163-133-00	CERAMIC CHIP	470PF	5%	50V
C1621	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C1641	1-163-035-00	CERAMIC CHIP	0.047µF		50V
C1642	1-126-964-11	ELECT	10µF	20%	50V
C1643	1-126-964-11	ELECT	10µF	20%	50V

<CONNECTOR>

CN501	* 1-564-506-11	PLUG, CONNECTOR 3P	
CN502	* 1-564-011-11	PIN, CONNECTOR 12P	
CN504	* 1-564-508-11	PLUG, CONNECTOR 5P	
CN505	* 1-564-509-11	PLUG, CONNECTOR 6P	
CN507	* 1-564-511-11	PLUG, CONNECTOR 8P	
CN508	* 1-580-837-11	PIN, CONNECTOR (PC BOARD) 3P	
CN509	* 1-564-506-11	PLUG, CONNECTOR 3P	
CN600	* 1-564-001-11	PIN, CONNECTOR 2P	

<DIODE>

D501	8-719-404-49	DIODE MA111
D502	8-719-404-49	DIODE MA111
D503	8-719-404-49	DIODE MA111
D504	8-719-404-49	DIODE MA111
D506	8-719-908-03	DIODE GP08D
D507	8-719-404-49	DIODE MA111
D508	8-719-404-49	DIODE MA111
D511	8-719-404-49	DIODE MA111
D512	8-719-404-49	DIODE MA111
D514	8-719-404-49	DIODE MA111
D520	8-719-800-76	DIODE 1SS226
D521	8-719-800-76	DIODE 1SS226
D831	8-719-404-49	DIODE MA111
D832	8-719-404-49	DIODE MA111
D833	8-719-404-49	DIODE MA111
D834	8-719-404-49	DIODE MA111
D835	8-719-109-89	DIODE RD5.6ESB2
D836	8-719-977-69	DIODE DTZ24B
D848	8-719-800-76	DIODE 1SS226
D1601	8-719-105-99	DIODE RD6.2M-B1
D1603	8-719-977-61	DIODE DTZ20B
D1606	8-719-981-00	DIODE ERC81-004
D1607	8-719-981-00	DIODE ERC81-004
D1608	8-719-978-24	DIODE DTZ-TT11-5.6A
D1609	8-719-977-49	DIODE DTZ15B
D1610	8-719-404-49	DIODE MA111
D1612	8-719-404-49	DIODE MA111
D1615	8-719-404-49	DIODE MA111
D1617	8-719-977-49	DIODE DTZ15B
D1618	8-719-977-49	DIODE DTZ15B
D1620	8-719-801-78	DIODE 1SS184
D1621	8-719-510-12	DIODE D10SC4M
D1622	8-719-801-78	DIODE 1SS184
D1623	8-719-801-78	DIODE 1SS184
D1626	8-719-404-49	DIODE MA111
D1627	8-719-404-49	DIODE MA111
D1628	8-719-404-49	DIODE MA111
D1635	8-719-404-49	DIODE MA111
D1699	8-719-404-49	DIODE MA111

<FUSE>

F1601	⚠1-532-777-21	FUSE, MICRO (SECONDARY) 1.25A/125V
F1602	⚠1-532-747-11	FUSE, GLASS TUBE (H.B.C) 5A/125V (PVM-8042Q, 8045Q, 9045PM)
F1602	⚠1-576-232-11	FUSE, (H.B.C.) 5A/250V (PVM-9042QM, 9045QM)

<IC>

IC501	8-759-909-70	IC CX23025 (PVM-8042Q, 8045Q, 9042QM, 9045QM)
IC502	8-759-100-60	IC UPC1377C
IC503	8-759-801-98	IC LA7830
IC504	8-759-231-58	IC TA7812S
IC505	8-759-009-51	IC MC14538BF

Ref.No.	Part No.	Description	Remark
IC506	8-759-209-54	IC TC4S01F	
IC507	8-759-209-69	IC TC4S11F	
IC831	8-759-473-06	IC BU4011BF-E2	
IC832	8-759-473-07	IC BU4070BF-E2	
IC833	8-759-009-51	IC MC14538BF	
IC1601	8-759-510-73	IC BA10393F-E2	
		<CHIP CONDUCTOR>	
JR507	1-216-295-91	SHORT 0 (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
JR510	1-216-295-91	SHORT 0	
JR518	1-216-295-91	SHORT 0	
JR601	1-216-295-91	SHORT 0	
JR602	1-216-295-91	SHORT 0	
		<COIL>	
L501	1-414-502-41	INDUCTOR 33mH	
L502	1-410-665-31	INDUCTOR 15µH	
L503	1-424-625-11	INDUCTOR 381.4µH	
L506	1-412-530-31	INDUCTOR 27µH	
L1601	1-459-155-00	COIL (WITH CORE) 45µH	
L1602	1-402-785-11	INDUCTOR 600µH	
L1603	1-410-397-21	FERRITE 1.1µH	
		<TRANSISTOR>	
Q501	1-801-806-11	TRANSISTOR DTC144EKA-T146 (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
Q502	1-801-806-11	TRANSISTOR DTC144EKA-T146 (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
Q503	8-729-901-06	TRANSISTOR DTA144EK (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
Q504	1-801-806-11	TRANSISTOR DTC144EKA-T146 (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
Q505	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q508	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q509	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q512	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q513	8-729-216-22	TRANSISTOR 2SA1162-G	
Q514	8-729-216-22	TRANSISTOR 2SA1162-G	
Q515	8-729-313-42	TRANSISTOR 2SD1134-C	
Q518	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q519	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q532	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q569	8-729-907-26	TRANSISTOR IMX1	
Q570	8-729-901-00	TRANSISTOR DTC124EK	
Q571	8-729-901-00	TRANSISTOR DTC124EK	
Q576	1-801-806-11	TRANSISTOR DTC144EKA-T146	
Q579	8-729-920-48	TRANSISTOR IMH2	
Q599	8-729-920-48	TRANSISTOR IMH2	
Q600	8-729-901-00	TRANSISTOR DTC124EK	
Q601	8-729-901-00	TRANSISTOR DTC124EK	
Q833	8-729-216-22	TRANSISTOR 2SA1162-G	
Q834	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q835	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q836	8-729-255-12	TRANSISTOR 2SC2551-O	
Q1601	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1602	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1603	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1604	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1605	8-729-119-80	TRANSISTOR 2SC2688-LK	
Q1606	8-729-133-42	TRANSISTOR 2SC2334-L	
Q1607	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1608	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1609	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1610	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1611	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1612	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1613	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1614	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1615	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1616	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1617	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1618	8-729-216-22	TRANSISTOR 2SA1162-G	
Q1619	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
Q1620	8-729-120-28	TRANSISTOR 2SC1623-L5L6	
		<RESISTOR>	
R501	1-216-089-91	RES,CHIP 47K 5% 1/10W (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
R502	1-216-089-91	RES,CHIP 47K 5% 1/10W (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
R503	1-249-437-11	CARBON 47K 5% 1/4W F (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
R504	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R505	1-249-393-11	CARBON 10 5% 1/4W F	
R506	1-216-071-00	RES,CHIP 8.2K 5% 1/10W	
R507	1-216-059-00	RES,CHIP 2.7K 5% 1/10W	
R508	1-216-085-00	RES,CHIP 33K 5% 1/10W	
R509	1-216-687-11	METAL CHIP 33K 0.50% 1/10W	
R510	1-216-683-11	METAL CHIP 22K 0.50% 1/10W	
R511	1-216-675-11	METAL CHIP 10K 0.50% 1/10W	
R512	1-218-761-11	METAL CHIP 240K 0.50% 1/10W	
R513	1-216-065-91	RES,CHIP 4.7K 5% 1/10W	
R514	1-218-754-11	METAL CHIP 120K 0.50% 1/10W (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
R515	1-216-081-00	RES,CHIP 22K 5% 1/10W	
R516	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R517	1-218-762-11	METAL CHIP 270K 0.50% 1/10W	
R518	1-249-422-11	CARBON 2.7K 5% 1/4W F	
R519	1-216-085-00	RES,CHIP 33K 5% 1/10W	
R520	1-216-677-11	METAL CHIP 12K 0.50% 1/10W	
R521	1-216-067-00	RES,CHIP 5.6K 5% 1/10W	
R522	1-216-107-00	RES,CHIP 270K 5% 1/10W (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
R523	1-216-081-00	RES,CHIP 22K 5% 1/10W	
R524	1-216-049-91	RES,CHIP 1K 5% 1/10W	
R525	1-216-434-11	METAL OXIDE 1.8K 5% 1W F	
R526	1-216-079-00	RES,CHIP 18K 5% 1/10W	
R527	1-249-437-11	CARBON 47K 5% 1/4W F	
R528	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R529	1-216-073-00	RES,CHIP 10K 5% 1/10W	
R530	1-216-089-91	RES,CHIP 47K 5% 1/10W	
R531	1-216-089-91	RES,CHIP 47K 5% 1/10W (PVM-8042Q, 8045Q, 9042QM, 9045QM)	
R532	1-216-097-91	RES,CHIP 100K 5% 1/10W	

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Ref.No.	Part No.	Description			Remark
R533	1-216-089-91	RES,CHIP	47K	5%	1/10W
R534	1-216-097-91	RES,CHIP	100K	5%	1/10W
R535	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R536	1-212-881-11	FUSIBLE	100	5%	1/4W F
R537	1-215-867-00	METAL OXIDE	470	5%	1W F
R538	1-216-095-00	RES,CHIP	82K	5%	1/10W
R539	1-216-095-00	RES,CHIP	82K	5%	1/10W
R540	1-216-101-00	RES,CHIP	150K	5%	1/10W
R541	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R542	1-216-075-00	RES,CHIP	12K	5%	1/10W
R543	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R544	1-216-101-00	RES,CHIP	150K	5%	1/10W
R545	1-216-033-00	RES,CHIP	220	5%	1/10W
R546	1-216-091-00	RES,CHIP	56K	5%	1/10W
R547	1-216-121-91	RES,CHIP	1M	5%	1/10W
R548	1-216-107-00	RES,CHIP	270K	5%	1/10W
R549	1-216-101-00	RES,CHIP	150K	5%	1/10W
R550	1-216-357-00	METAL OXIDE	4.7	5%	1W F
R552	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R553	1-216-689-11	RES,CHIP	39K	5%	1/10W
R554	1-216-073-00	RES,CHIP	10K	5%	1/10W
R555	1-216-077-00	RES,CHIP	15K	5%	1/10W
R557	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R558	1-216-049-91	RES,CHIP	1K	5%	1/10W
R559	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R560	1-216-037-00	RES,CHIP	330	5%	1/10W
R561	1-216-081-00	RES,CHIP	22K	5%	1/10W
R562	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R563	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R564	1-249-415-11	CARBON	680	5%	1/4W F
R565	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R566	1-216-025-91	RES,CHIP	100	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R567	1-216-095-00	RES,CHIP	82K	5%	1/10W
R568	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R569	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R570	1-216-093-00	RES,CHIP	68K	5%	1/10W
R571	1-216-089-91	RES,CHIP	47K	5%	1/10W
R572	1-216-095-00	RES,CHIP	82K	5%	1/10W
R573	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R574	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R575	1-216-105-91	RES,CHIP	220K	5%	1/10W
R576	1-216-109-00	RES,CHIP	330K	5%	1/10W
R577	1-216-105-91	RES,CHIP	220K	5%	1/10W
R578	1-249-457-71	CARBON	6.8	5%	1/4W F
R579	1-249-457-71	CARBON	6.8	5%	1/4W F
R589	1-216-101-00	RES,CHIP	150K	5%	1/10W
		(PVM-8042Q, 8045Q, 9042QM, 9045QM)			
R591	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R592	1-216-033-00	RES,CHIP	220	5%	1/10W
R593	1-216-101-00	RES,CHIP	150K	5%	1/10W
R594	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R600	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R601	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R831	1-216-049-91	RES,CHIP	1K	5%	1/10W
R832	1-216-075-00	RES,CHIP	12K	5%	1/10W
R833	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R834	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R835	1-216-081-00	RES,CHIP	22K	5%	1/10W
R836	1-216-049-91	RES,CHIP	1K	5%	1/10W
R837	1-216-075-00	RES,CHIP	12K	5%	1/10W
R838	1-216-049-91	RES,CHIP	1K	5%	1/10W
R839	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R840	1-216-097-91	RES,CHIP	100K	5%	1/10W
R841	1-216-093-00	RES,CHIP	68K	5%	1/10W
R842	1-216-093-00	RES,CHIP	68K	5%	1/10W
R843	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R844	1-216-077-00	RES,CHIP	15K	5%	1/10W
R847	1-216-049-91	RES,CHIP	1K	5%	1/10W
R850	1-216-085-00	RES,CHIP	33K	5%	1/10W
R851	1-216-669-11	METAL CHIP	5.6K	0.50%	1/10W
R852	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R853	1-216-105-91	RES,CHIP	220K	5%	1/10W
R854	1-218-754-11	METAL CHIP	120K	0.50%	1/10W
R855	1-216-697-91	METAL CHIP	82K	0.50%	1/10W
R856	1-216-699-11	METAL CHIP	100K	0.50%	1/10W
R857	1-216-686-11	METAL CHIP	30K	0.50%	1/10W
R858	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R859	1-216-436-00	METAL OXIDE	3.9K	5%	1W F
R860	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R861	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R862	1-216-675-11	METAL CHIP	10K	0.50%	1/10W
R863	1-249-435-11	CARBON	33K	5%	1/4W F
R1503	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1504	1-216-695-11	METAL CHIP	68K	0.50%	1/10W
R1505	1-216-089-91	RES,CHIP	47K	5%	1/10W
R1506	1-216-667-11	METAL CHIP	4.7K	0.50%	1/10W
R1507	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1508	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1509	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1510	1-249-425-11	CARBON	4.7K	5%	1/4W F
R1511	1-216-033-00	RES,CHIP	220	5%	1/10W
R1512	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1513	1-216-017-91	RES,CHIP	47	5%	1/10W
R1519	1-216-025-91	RES,CHIP	100	5%	1/10W
R1520	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1601	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R1602	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R1603	1-216-671-11	METAL CHIP	6.8K	0.50%	1/10W
R1604	1-249-433-11	CARBON	22K	5%	1/4W F
R1605	1-216-070-00	RES,CHIP	7.5K	5%	1/10W
R1606	1-216-070-00	RES,CHIP	7.5K	5%	1/10W
R1607	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R1608	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1609	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1610	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1611	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1612	1-215-913-11	METAL OXIDE	220	5%	3W F
R1613	1-216-025-91	RES,CHIP	100	5%	1/10W
R1614	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R1615	1-216-657-11	METAL CHIP	1.8K	0.50%	1/10W
R1616	1-216-629-11	METAL CHIP	120	0.50%	1/10W
R1617	1-216-659-11	METAL CHIP	2.2K	0.50%	1/10W
R1618	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1620	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1621	1-216-073-00	RES,CHIP	10K	5%	1/10W

Ref.No.	Part No.	Description			Remark
R1622	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1623	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1624	1-216-246-00	RES,CHIP	100K	5%	1/8W
R1625	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1626	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1627	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1628	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1629	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R1630	1-216-683-11	METAL CHIP	22K	0.50%	1/10W
R1631	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
R1632	1-216-042-00	RES,CHIP	510	5%	1/10W
R1633	1-216-109-00	RES,CHIP	330K	5%	1/10W
R1634	1-216-099-00	RES,CHIP	120K	5%	1/10W
R1635	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1636	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1640	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R1641	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1642	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1643	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1644	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1645	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1646	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1647	1-216-685-11	METAL CHIP	27K	0.50%	1/10W
R1648	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1649	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1650	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1651	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1652	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1653	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1654	1-216-681-11	METAL CHIP	18K	0.50%	1/10W
R1655	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1656	1-216-643-11	METAL CHIP	470	0.50%	1/10W
R1657	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1658	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R1659	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1660	1-216-649-11	METAL CHIP	820	0.50%	1/10W
R1661	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1691	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1692	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1693	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1694	1-216-081-00	RES,CHIP	22K	5%	1/10W
R1695	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1696	1-216-073-00	RES,CHIP	10K	5%	1/10W

<VARIABLE RESISTOR>

RV501	1-238-019-11	RES, ADJ, CARBON 47K
RV502	1-241-765-11	RES, ADJ, CARBON 22K
RV503	1-241-763-11	RES, ADJ, CERMET 4.7K
RV504	1-224-250-XX	RES, ADJ, METAL GLAZE 2.2K
RV505	1-241-759-11	RES, ADJ, CARBON 220
RV507	1-241-762-11	RES, ADJ, CARBON 2.2K
RV508	1-241-761-11	RES, ADJ, CARBON 1K
RV509	1-241-768-11	RES, ADJ, CARBON 220K
RV511	1-241-763-11	RES, ADJ, CARBON 4.7K
RV512	1-241-763-11	RES, ADJ, CARBON 4.7K
RV514	1-238-019-11	RES, ADJ, CARBON 47K
RV515	1-241-768-11	RES, ADJ, CARBON 220K
RV516	1-241-763-11	RES, ADJ, CERMET 4.7K
RV517	1-241-760-11	RES, ADJ, CARBON 470
RV518	1-241-763-11	RES, ADJ, CARBON 4.7K
RV831	1-228-997-00	RES, ADJ, METAL GLAZE 100K
RV832	1-241-764-11	RES, ADJ, CERMET 10K
⊠RV833 ⚠		RES, ADJ, METAL GLAZE 47K
RV1601 ⚠	1-241-762-11	RES, ADJ, CERMET 2.2K
RV1602	1-241-761-11	RES, ADJ, CARBON 1K
⊠RV1603 ⚠		RES, ADJ, METAL GLAZE 47K

<RELAY>

RY1601	1-755-022-11	RELAY, POWER

<TRANSFORMER>

T1601	1-437-216-11	TRANSFORMER, DRIVE

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*	A-1372-542-A	MOUNTED PWB, HA
		**********
*	4-348-208-00	HOLDER, LED

<CAPACITOR>

C001	1-163-038-91	CERAMIC CHIP 0.1µF	25V
C002	1-163-038-91	CERAMIC CHIP 0.1µF	25V

<CONNECTOR>

CN001		1-506-478-11	PIN, CONNECTOR 13P
CN002	*	1-564-009-11	PIN, CONNECTOR 10P
CN003	*	1-564-004-11	PIN, CONNECTOR 5P

<DIODE>

D001	8-719-920-05	DIODE SLP281C-50
D002	8-719-109-68	DIODE RD3.6ESB1
D003	8-719-404-49	DIODE MA111

<IC>

IC001	8-759-209-69	IC TC4S11F

<CHIP CONDUCTOR>

JR003	1-216-295-91	SHORT 0
JR006	1-216-295-91	SHORT 0
JR007	1-216-295-91	SHORT 0

<TRANSISTOR>

Q001	8-729-120-28	TRANSISTOR 2SC1623-L5L6

HA X S

Ref.No.	Part No.	Description			Remark
	<RESISTOR>				
R001	1-247-713-11	CARBON	1K	5%	1/4W
R004	1-216-081-00	RES,CHIP	22K	5%	1/10W
R006	1-216-049-91	RES,CHIP	1K	5%	1/10W
R007	1-216-049-91	RES,CHIP	1K	5%	1/10W
R008	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R009	1-216-049-91	RES,CHIP	1K	5%	1/10W
R010	1-216-057-00	RES,CHIP	2.2K	5%	1/10W
	<VARIABLE RESISTOR>				
RV001	1-225-385-11	RES, VAR, CARBON 20K			
RV002	1-225-385-11	RES, VAR, CARBON 20K			
RV003	1-225-385-11	RES, VAR, CARBON 20K			
RV004	1-225-385-11	RES, VAR, CARBON 20K			
RV005	1-225-385-11	RES, VAR, CARBON 20K			
RV006	1-225-385-11	RES, VAR, CARBON 20K			
RV007	1-226-773-11	RES, ADJ, METAL GLAZE 22K			
RV008	1-226-773-11	RES, ADJ, METAL GLAZE 22K			
RV009	1-226-773-11	RES, ADJ, METAL GLAZE 22K			
RV010	1-226-773-11	RES, ADJ, METAL GLAZE 22K			
RV011	1-226-773-11	RES, ADJ, METAL GLAZE 22K			
RV012	1-226-773-11	RES, ADJ, METAL GLAZE 22K			
	<SWITCH>				
S001	1-554-419-00	SWITCH, PUSH (1 KEY)			
S002	1-554-419-00	SWITCH, PUSH (1 KEY)			
S003	1-554-419-00	SWITCH, PUSH (1 KEY)			
S004	1-554-419-00	SWITCH, PUSH (1 KEY)			
S005	1-554-419-00	SWITCH, PUSH (1 KEY)			
S006	1-554-419-00	SWITCH, PUSH (1 KEY)			
S007	1-572-522-11	SWITCH, PUSH (1 KEY)			
S008	1-554-419-00	SWITCH, PUSH (1 KEY)			
**********					
	*1-641-724-11	PC BOARD, X **********			
	<CONNECTOR>				
CN21	* 1-564-518-11	PLUG, CONNECTOR 3P			
	<DIODE>				
D21	8-719-023-78	DIODE SEL3810DLC05			
D22	8-719-023-78	DIODE SEL3810DLC05			
D23	8-719-023-78	DIODE SEL3810DLC05			
**********					
	* A-1394-917-A	S BOARD, COMPLETE **********			

Ref.No.	Part No.	Description			Remark
	<CAPACITOR>				
C1101	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C1102	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1103	1-124-589-11	ELECT	47µF	20%	16V
C1104	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C1105	1-163-248-11	CERAMIC CHIP	75PF	5%	50V
C1106	1-163-101-00	CERAMIC CHIP	22PF	5%	50V
C1107	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1108	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C1109	1-163-031-11	CERAMIC CHIP	0.01µF		50V
C1110	1-163-117-00	CERAMIC CHIP	100PF	5%	50V
C1111	1-163-018-00	CERAMIC CHIP	0.0056µF	10%	50V
C1112	1-126-160-11	ELECT	1µF	20%	50V
C1113	1-163-119-00	CERAMIC CHIP	120PF	5%	50V
C1114	1-163-103-00	CERAMIC CHIP	27PF	5%	50V
C1115	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1116	1-163-248-11	CERAMIC CHIP	75PF	5%	50V
C1117	1-124-589-11	ELECT	47µF	20%	16V
C1118	1-164-004-11	CERAMIC CHIP	0.1µF	10%	25V
C1119	1-163-020-00	CERAMIC CHIP	0.0082µF	10%	50V
C1120	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C1121	1-163-231-11	CERAMIC CHIP	15PF	5%	50V
C1122	1-163-222-11	CERAMIC CHIP	5PF 0.25PF		50V
C1123	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C1130	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
C1131	1-163-097-00	CERAMIC CHIP	15PF	5%	50V
	<CONNECTOR>				
CN1101 *	1-565-488-11	CONNECTOR, BOARD TO BOARD 12P			
	<DIODE>				
D1101	8-719-404-49	DIODE MA111			
D1102	8-719-404-49	DIODE MA111			
	<IC>				
IC1101	8-752-056-67	IC CXA1214P			
	<COIL>				
L1101	1-408-605-31	INDUCTOR 15µH			
L1102	1-404-496-00	COIL			
L1103	1-404-496-00	COIL			
L1104	1-408-605-31	INDUCTOR 15µH			
L1110	1-412-008-31	INDUCTOR CHIP 15µH			
L1111	1-412-008-31	INDUCTOR CHIP 15µH			
	<TRANSISTOR>				
Q1101	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1102	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
Q1103	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1104	8-729-216-22	TRANSISTOR 2SA1162-G			
Q1105	1-801-806-11	TRANSISTOR DTC144EK-T147			
Q1106	1-801-806-11	TRANSISTOR DTC144EK-T147			
Q1107	8-729-109-44	TRANSISTOR 2SK94-X4			

Ref.No.	Part No.	Description			Remark
Q1108	8-729-120-28	TRANSISTOR 2SC1623-L5L6			
		<RESISTOR>			
R1101	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1102	1-216-067-00	RES,CHIP	5.6K	5%	1/10W
R1103	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1104	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1105	1-216-031-00	RES,CHIP	180	5%	1/10W
R1106	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1107	1-216-071-00	RES,CHIP	8.2K	5%	1/10W
R1108	1-216-039-00	RES,CHIP	390	5%	1/10W
R1109	1-216-063-91	RES,CHIP	3.9K	5%	1/10W
R1110	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1111	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1112	1-216-059-00	RES,CHIP	2.7K	5%	1/10W
R1113	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1114	1-216-055-00	RES,CHIP	1.8K	5%	1/10W
R1115	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1116	1-216-069-00	RES,CHIP	6.8K	5%	1/10W
R1117	1-216-061-00	RES,CHIP	3.3K	5%	1/10W
R1118	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1119	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1120	1-216-097-91	RES,CHIP	100K	5%	1/10W
R1121	1-216-121-91	RES,CHIP	1M	5%	1/10W
R1122	1-216-039-00	RES,CHIP	390	5%	1/10W
R1123	1-216-065-91	RES,CHIP	4.7K	5%	1/10W
R1124	1-216-029-00	RES,CHIP	150	5%	1/10W
R1125	1-216-029-00	RES,CHIP	150	5%	1/10W
R1126	1-216-053-00	RES,CHIP	1.5K	5%	1/10W
R1127	1-216-043-91	RES,CHIP	560	5%	1/10W
R1128	1-216-049-91	RES,CHIP	1K	5%	1/10W
R1129	1-216-091-00	RES,CHIP	56K	5%	1/10W
R1131	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1132	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1133	1-216-073-00	RES,CHIP	10K	5%	1/10W
R1134	1-216-091-00	RES,CHIP	56K	5%	1/10W
		<VARIABLE RESISTOR>			
RV1101	1-241-763-11	RES, ADJ, CARBON 4.7K			
RV1102	1-241-762-11	RES, ADJ, CARBON 2.2K			
		<TRANSFORMER>			
T1101	1-404-584-11	COIL			

****

G BOARD (SOPS-1021)
****

	4-812-134-11	RIVET,NYLON			
		<CAPACITOR>			
C602	⚠1-136-889-11	FILM	0.22MF	20%	250V
C603	⚠1-161-741-51	CERAMIC	1000PF	10%	400V
C604	⚠1-161-741-51	CERAMIC	1000PF	10%	400V
C605	⚠1-161-741-51	CERAMIC	1000PF	10%	400V
C608	1-162-599-12	CERAMIC	4700PF	20%	400V
C609	1-162-599-12	CERAMIC	4700PF	20%	400V
C610	1-125-724-11	ELECT	100MF	20%	400V
C611	1-136-206-11	FILM	0.33MF	10%	630V
C612	1-107-909-11	ELECT	47MF	20%	50V
C613	1-136-169-00	FILM	0.22MF	5%	50V
C614	1-136-169-00	FILM	0.22MF	5%	50V
C615	1-130-471-00	FILM	0.001MF	5%	50V
C616	1-130-479-91	FILM	4700PF	5%	50V
C651	1-161-825-11	CERAMIC	220PF	10%	500V
C652	1-111-065-11	ELECT	680MF	20%	25V
C653	1-126-969-11	ELECT	220MF	20%	35V
C654	1-130-483-91	FILM	0.01MF	5%	50V
		<CONNECTOR>			
CN610	* 1-560-436-00	PIN,CONNECTOR 3P			
CN651	* 1-564-518-11	PLUG,CONNECTOR 3P			
		<DIODE>			
D601	⚠8-719-510-22	DIODE D3SB60			
D602	8-719-911-19	DIODE 1SS119-25			
D603	8-719-970-87	DIODE ERA38-06			
D604	8-719-970-87	DIODE ERA38-06			
D605	8-719-110-53	DIODE RD20ESB3			
D651	⚠9-907-820-01	DIODE ESAC39M			
		<IC>			
IC601	1-809-086-12	IC CH-1018			
IC651	8-759-908-15	IC TL431CLP			
		<COIL>			
L601	⚠1-424-616-11	L.F.T			
L602	⚠1-424-574-11	L.F.T			
L651	1-424-255-11	COIL, CHOCKE (MOLDE)	10µH		
L652	1-424-615-21	COIL,CHOKE			
		<PHOTO COUPLER>			
PH601	8-719-159-90	PHOTO COUPLER PS2652-P			
		<TRANSISTOR>			
Q601	8-729-322-18	TRANSISTOR 2SK1402A			
		<RESISTOR>			
R601	1-216-411-11	METAL OXIDE	1.5	5%	5W F
R602	1-216-411-11	METAL OXIDE	1.5	5%	5W F
R603	1-215-904-11	METAL OXIDE	100K	5%	2W F
R604	1-215-904-11	METAL OXIDE	100K	5%	2W F
R605	1-212-865-00	FUSIBLE	22	5%	1/4W F
R606	1-249-404-00	CARBON	82	5%	1/4W

G

Ref.No.	Part No.	Description			Remark
R607	1-260-128-91	CARBON	270K	5% 1/2W	
R608	1-260-128-91	CARBON	270K	5% 1/2W	
R609	1-215-904-51	METAL OXIDE	100K	5% 2W	F
R610	1-216-341-11	METAL OXIDE	0.22	10% 1/2W	
R611	1-249-395-11	CARBON	15	5% 1/4W	
R612	1-249-399-11	CARBON	33	5% 1/4W	
R613	1-215-904-51	METAL OXIDE	100K	5% 2W	F
R614	1-247-815-91	CARBON	220	5% 1/4W	
R620	1-218-265-11	METAL GRAZE	8.2M	5% 1W	
R651	1-215-886-11	METAL OXIDE	100	5% 2W	F
R652	1-215-886-11	METAL OXIDE	100	5% 2W	F
R653	1-260-107-11	CARBON	4.7K	5% 1/2W	
R654	1-260-107-11	CARBON	4.7K	5% 1/2W	
R655	1-249-435-11	CARBON	33K	5% 1/4W	
R656	1-249-435-11	CARBON	33K	5% 1/4W	
R657	1-249-420-11	CARBON	1.8K	5% 1/4W	
R658	1-249-435-11	CARBON	33K	5% 1/4W	

<VALIABLE RESISTOR>

⧓RV651	⚠	RES,ADJ,CARBON	1K	

<TRANSFORMER>

T601	1-450-760-12	TRANSFORMER, CONVERTER	

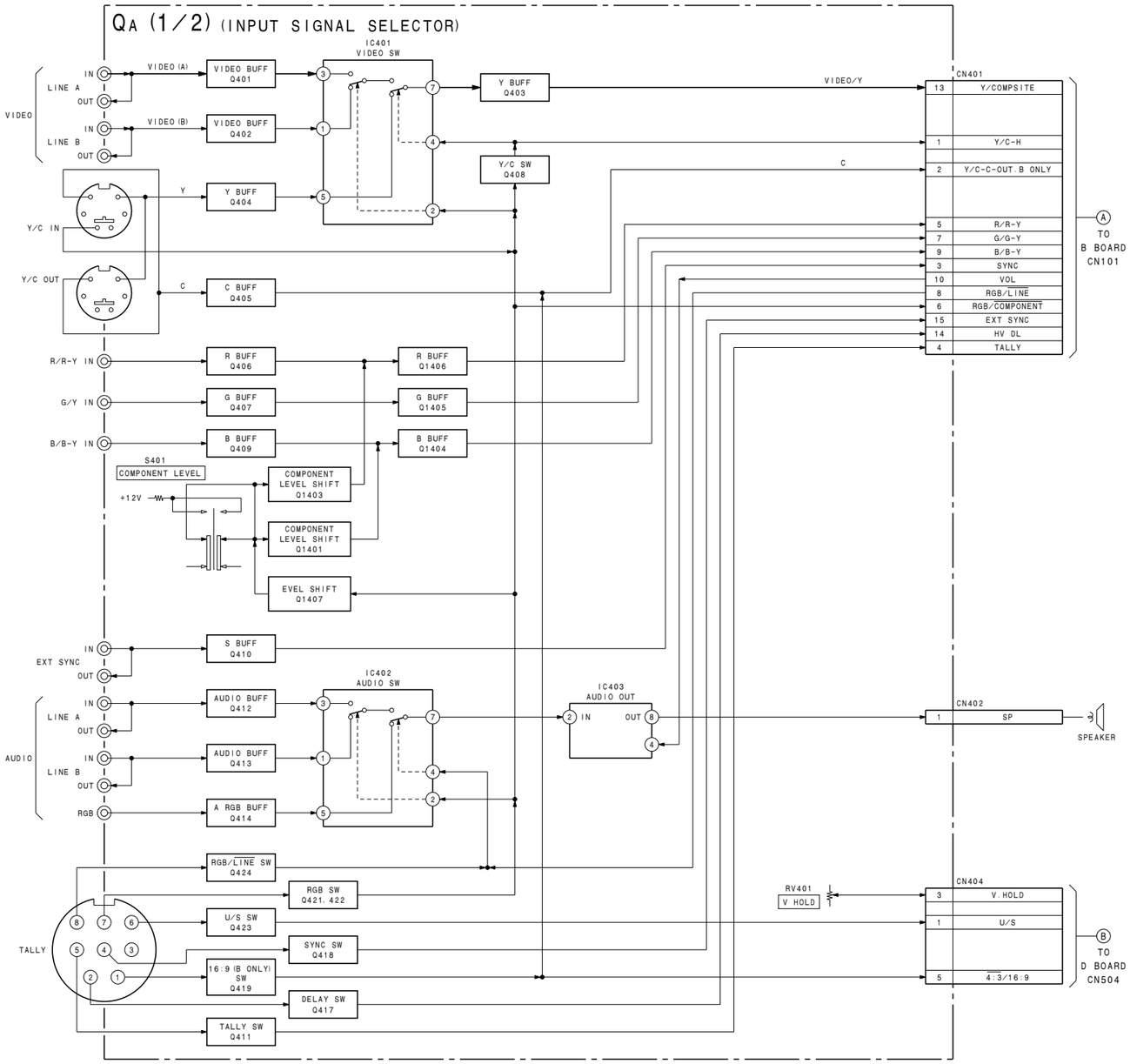
****

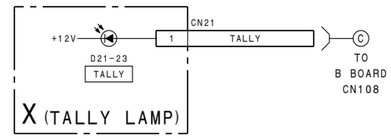
ACCESSORIES AND PACKING MATERIALS
****

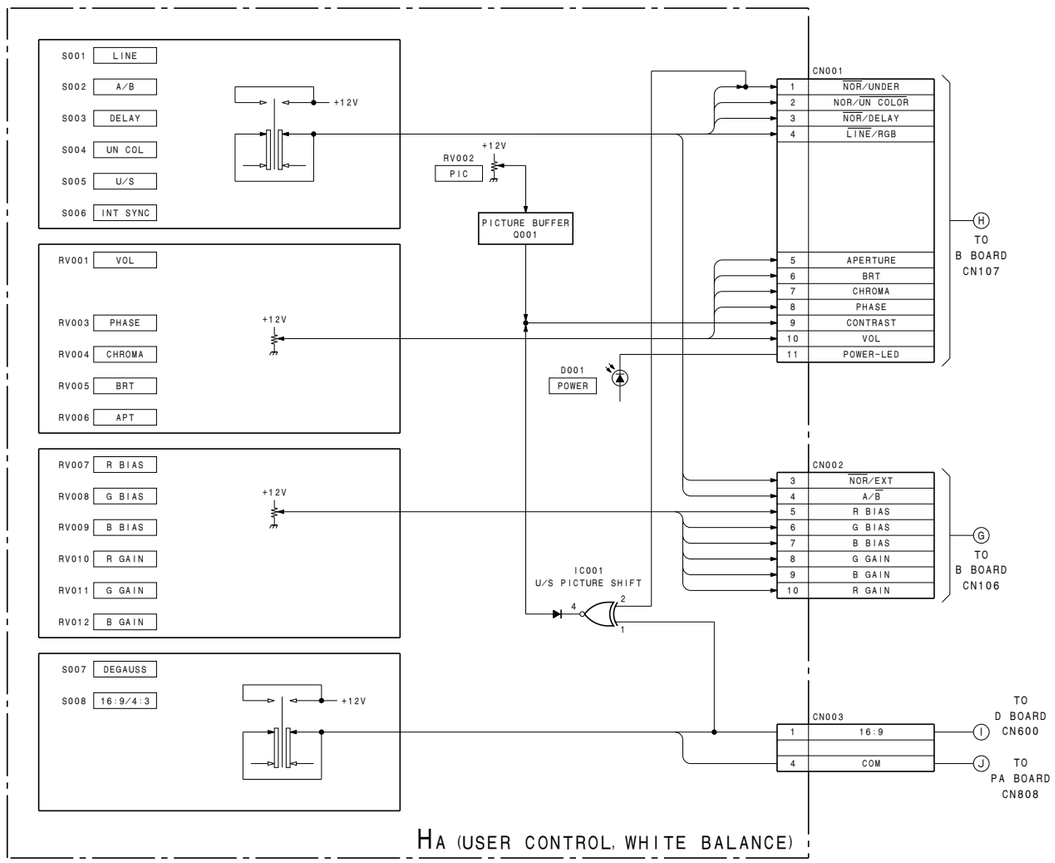
	1-690-871-11	CABLE (MINI DIN) 8P
	2-990-241-02	HOLDER (A), PLUG
	2-990-242-01	HOLDER (B), PLUG
	3-865-058-11	OPERATING INSTRUCTIONS (PVM-8042Q, 8045Q) (ENGLISH, FRENCH, SPANISH)
	3-865-058-21	OPERATING INSTRUCTIONS (PVM-9042Q, 9045QM) (ENGLISH, FRENCH, GERMAN, ITALIAN, SPANISH, CHINESE)
	3-865-341-11	OPERATING INSTRUCTIONS (PVM-9045PM) (ENGLISH)
	4-034-835-01	PLATE, TALLY
⚠	1-765-718-11	CORD SET, POWER (125V/10.0A) (PVM-8042Q, 8045Q, 9045PM)
⚠	1-782-929-11	CORD, POWER SUPPLY (BS 3P) (250V/10.0A) (PVM-9042QM, 9045QM)
*	4-034-955-01	CUSHION (UPPER) (ASSY)
*	4-034-956-01	CUSHION (LOWER) (ASSY)
*	4-384-927-11	BAG, PROTECTION

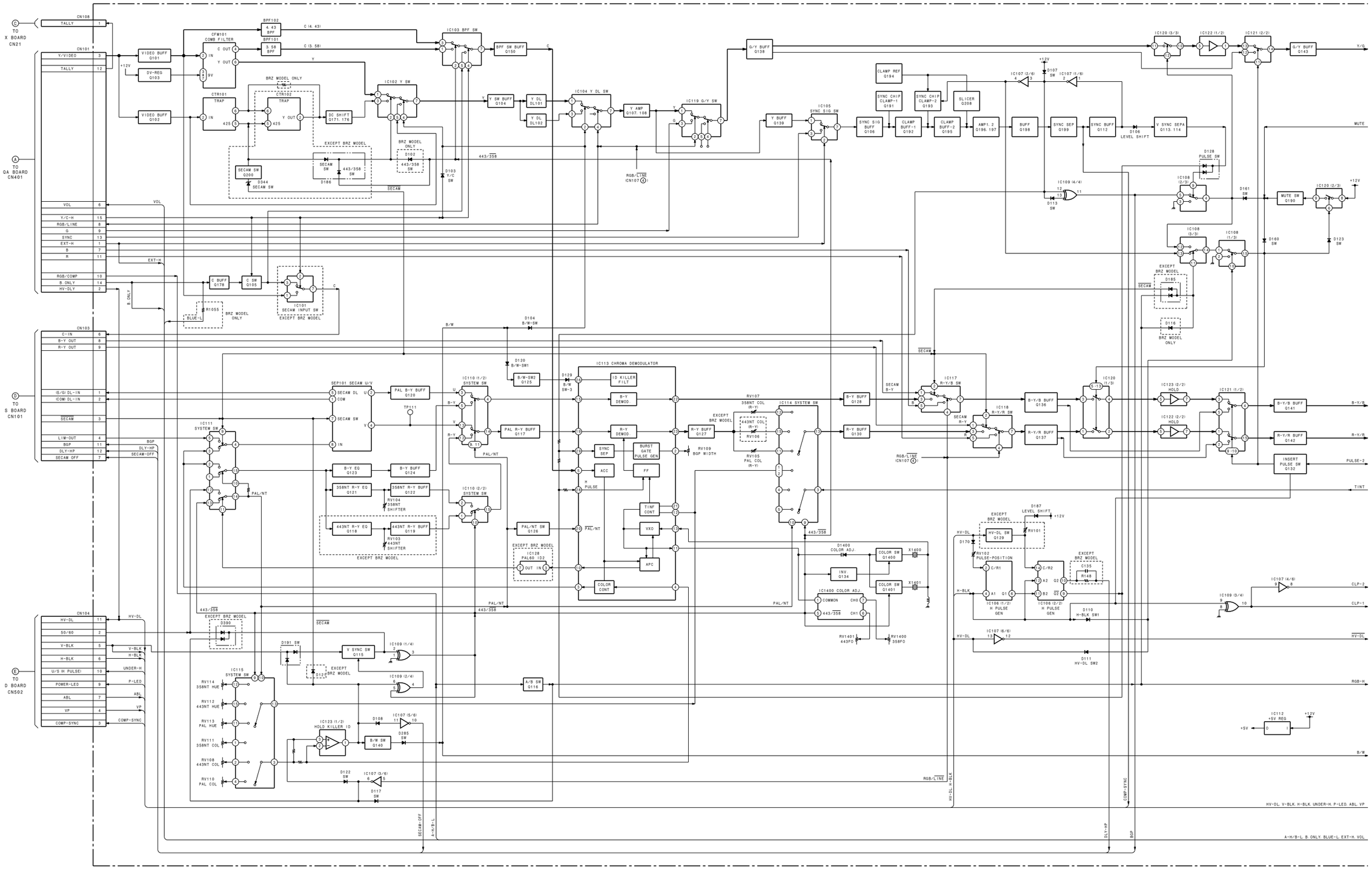
Ref.No.	Part No.	Description	Remark
**********			
		MISCELLANEOS **********	
⚠	1-413-720-21	SWITCHING REGULATOR	
⚠	1-416-882-11	COIL, DEMAGNETIC	
⚠	1-451-319-22	DEFLECTION YOKE (Y9FXC)	
⚠	8-737-154-05	PICTURE TUBE SD-167 (PVM-8042Q, 9042QM (AEP))	
⚠	8-737-651-05	PICTURE TUBE 09FX (PVM-8045Q, 9042QM (AUS), 9045QM (AEP), 9045QM (AUS), 9045PM (BRZ))	

SECTION 9
BLOCK DIAGRAMS








CN108
TALLY 1
TO X BOARD CN21
CN101
Y/VIDEO 3
TALLY 12
TO QA BOARD CN401
VOL 6
Y/C-H 15
RGB/LINE 8
G 9
SYNC 13
EXT-H 1
B 7
R 11
RGB/COMP 10
B ONLY 14
HV-DLY 2
CN103
C-IN 6
B-Y OUT 8
R-Y OUT 9
TO S BOARD CN101
(S/G) DL-IN 1
(COM) DL-IN 2
SECAM 3
LIM-OUT 4
BGP 11
DLY-HP 12
SECAM OFF 7
CN104
HV-DL 11
50/60 2
V-BLK 5
H-BLK 6
U/S (H PULSE) 10
POWER-LED 9
ABL 7
VP 4
COMP-SYNC 3
TO D BOARD CN502
VIDEO BUFF Q101
DV-REG Q103
VIDEO BUFF Q102
+12V
CFW101 COMB FILTER
C OUT
Y OUT
IN
9V
BPF102 4.43 BPF
BPF101 3.58 BPF
C (4.43)
C (3.58)
Y
CTR101 TRAP
CTR102 TRAP
425
BRZ MODEL ONLY
DC SHIFT Q171.176
EXCEPT BRZ MODEL
SECAM SW Q200
D344 SECAM SW
SECAM SW
443/358 SW
D186
D102 443/358 SW
D103 Y/C SW
443/358
SECAM
IC103 BPF SW
IC102 Y SW
BPF SW BUFF Q150
Y SW BUFF Q104
Y DL DL101
Y DL DL102
IC104 Y DL SW
Y AMP Q107.108
RGB/LINE (ICN107 4)
IC119 G/Y SW
G/Y BUFF Q138
V BUFF Q139
IC105 SYNC SIG SW
SYNC SIG BUFF Q106
CLAMP REF Q194
SYNC CHIP CLAMP-1 Q191
CLAMP BUFF-1 Q192
SYNC CHIP CLAMP-2 Q193
CLAMP BUFF-2 Q195
SLICER Q208
AMP1. 2 Q196. 197
BUFF Q198
SYNC SEP Q199
SYNC BUFF Q112
D106 LEVEL SHIFT
V SYNC SEPA Q113. 114
MUTE
IC107 (3/6)
IC107 (1/6)
D107 SW
IC120 (3/3)
IC122 (1/2)
IC121 (2/2)
G/Y BUFF Q143
Y/G
D128 PULSE SW
IC109 (4/4)
D113 SW
IC108 (2/3)
D161 SW
MUTE SW Q190
IC120 (2/3)
+12V
IC108 (3/3)
IC108 (1/3)
D160 SW
D123 SW
EXCEPT BRZ MODEL
D185
SECAM
D116
BRZ MODEL ONLY
VOL
EXT-H
B ONLY
C BUFF Q178
C SW Q105
IC101 SECAM INPUT SW
EXCEPT BRZ MODEL
R1055
BLUE-L
BRZ MODEL ONLY
B/W
D104 B/W-SW
D120 B/W-SW1
B/W-SW2 Q125
D119 B/W SW-3
IC113 CHROMA DEMODULATOR
ID KILLER FILT
B-Y DEMOD.
R-Y DEMOD.
SYNC SEP
BURST GATE PULSE GEN
ACC
FF
H PULSE
TINF CONT
VXO
APC
COLOR CONT
SEP101 SECAM U/V
SECAM DL
COM
SECAM SW
IN
PAL B-Y BUFF Q120
TP111
IC110 (1/2) SYSTEM SW
PAL R-Y BUFF Q117
PAL/NT
B-Y EQ Q123
B-Y BUFF Q124
358NT R-Y EQ Q121
358NT R-Y BUFF Q122
RV104 358NT SHIFTER
443NT R-Y EQ Q118
443NT R-Y BUFF Q119
RV103 443NT SHIFTER
EXCEPT BRZ MODEL
IC110 (2/2) SYSTEM SW
PAL/NT SW Q126
EXCEPT BRZ MODEL
IC128 PAL60 102
OUT IN
IC111 SYSTEM SW
PAL/NT
443/358
EXCEPT BRZ MODEL
D390
SECAM
D191 SW
V SYNC SW Q115
EXCEPT BRZ MODEL
D124
IC109 (1/4)
IC109 (2/4)
A/B SW Q116
IC115 SYSTEM SW
RV114 358NT HUE
RV112 443NT HUE
RV113 PAL HUE
RV111 358NT COL
RV108 443NT COL
RV110 PAL COL
IC123 (1/2) HOLD KILLER IO
D108
IC107 (5/6)
B/W SW Q140
D285 SW
D122 SW
IC107 (3/6)
D117 SW
RV107 358NT COL (R-Y)
RV106 443NT COL (R-Y)
RV105 PAL COL (R-Y)
RV109 BGP WIDTH
IC114 SYSTEM SW
EXCEPT BRZ MODEL
R-Y BUFF Q127
R-Y BUFF Q130
B-Y BUFF Q128
D1400 COLOR ADJ.
INV. Q134
IC1400 COLOR ADJ.
COMMON
443/358
CH0
CH1
COLOR SW Q1400
COLOR SW Q1401
X1400
X1401
RV1401 443FO
RV1400 358FO
SECAM B-Y
IC117 R-Y/B SW
IC118 R-Y/R SW
SECAM R-Y
RGB/LINE (ICN107 4)
B-Y/B BUFF Q136
R-Y/R BUFF Q137
IC120 (1/3)
IC123 (2/2) HOLD
IC121 (1/2)
IC122 (2/2) HOLD
B-Y/B BUFF Q141
B-Y/B
R-Y/R BUFF Q142
R-Y/R
INSERT PULSE SW Q132
PULSE-2
TINT
EXCEPT BRZ MODEL
D187 LEVEL SHIFT
+12V
HV-DL SW Q129
RV101
HV-DL
D170
RV102 PULSE-POSITION
C/R1
C/R2
EXCEPT BRZ MODEL
C135
R148
H-BLK
IC106 (1/2) H PULSE GEN
IC106 (2/2) H PULSE GEN
A1
G1
A2
G2
B1
B2
D110 H-BLK SW1
IC107 (6/6)
D111 HV-DL SW2
IC107 (4/6)
IC109 (3/4)
CLP-2
CLP-1
HV-DL
RGB-H
IC112 +5V REG
+5V
+12V
B/W
RGB/LINE
HV-DL H-BLK
COMP-SYNC
HV-DL. V-BLK. H-BLK. UNDER-H. P-LED. ABL. VP
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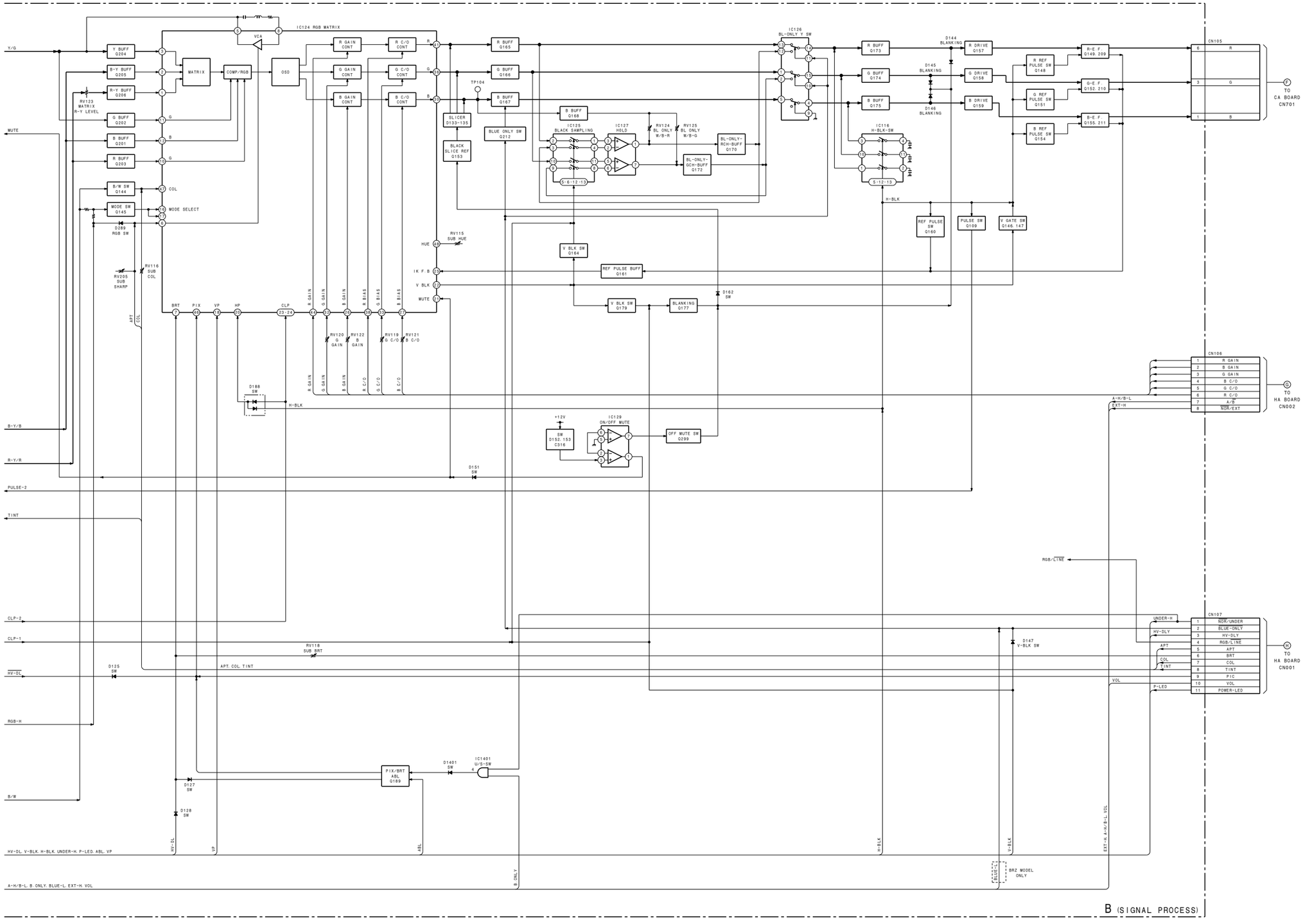
SECAM-OFF
A-H/B-L
12V-HP
BGP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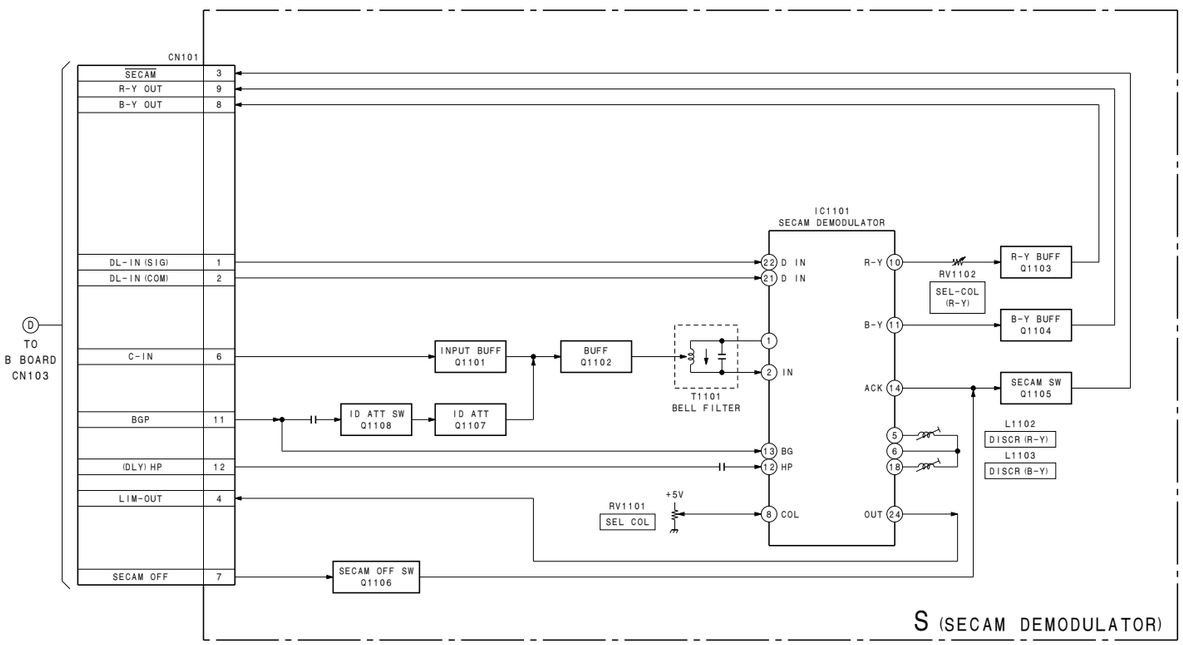
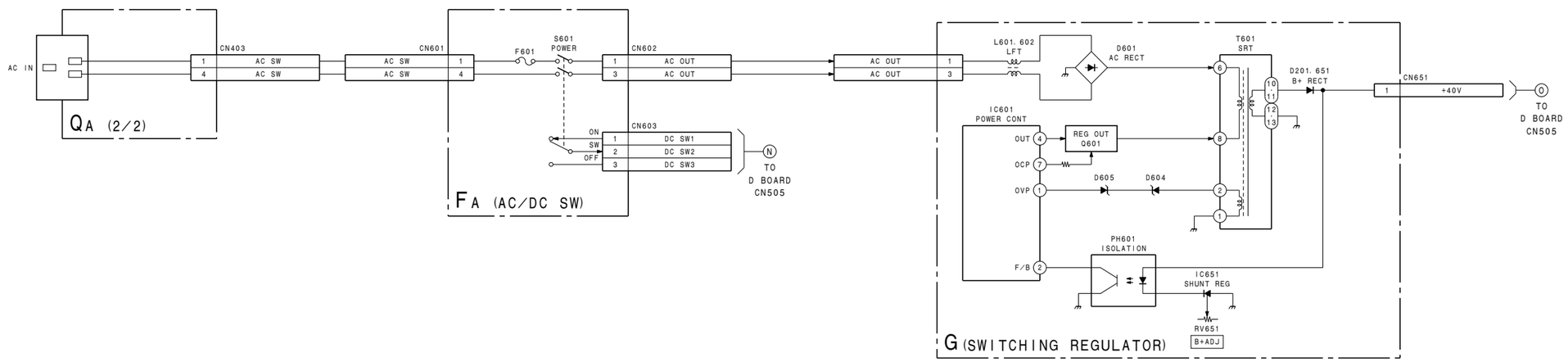
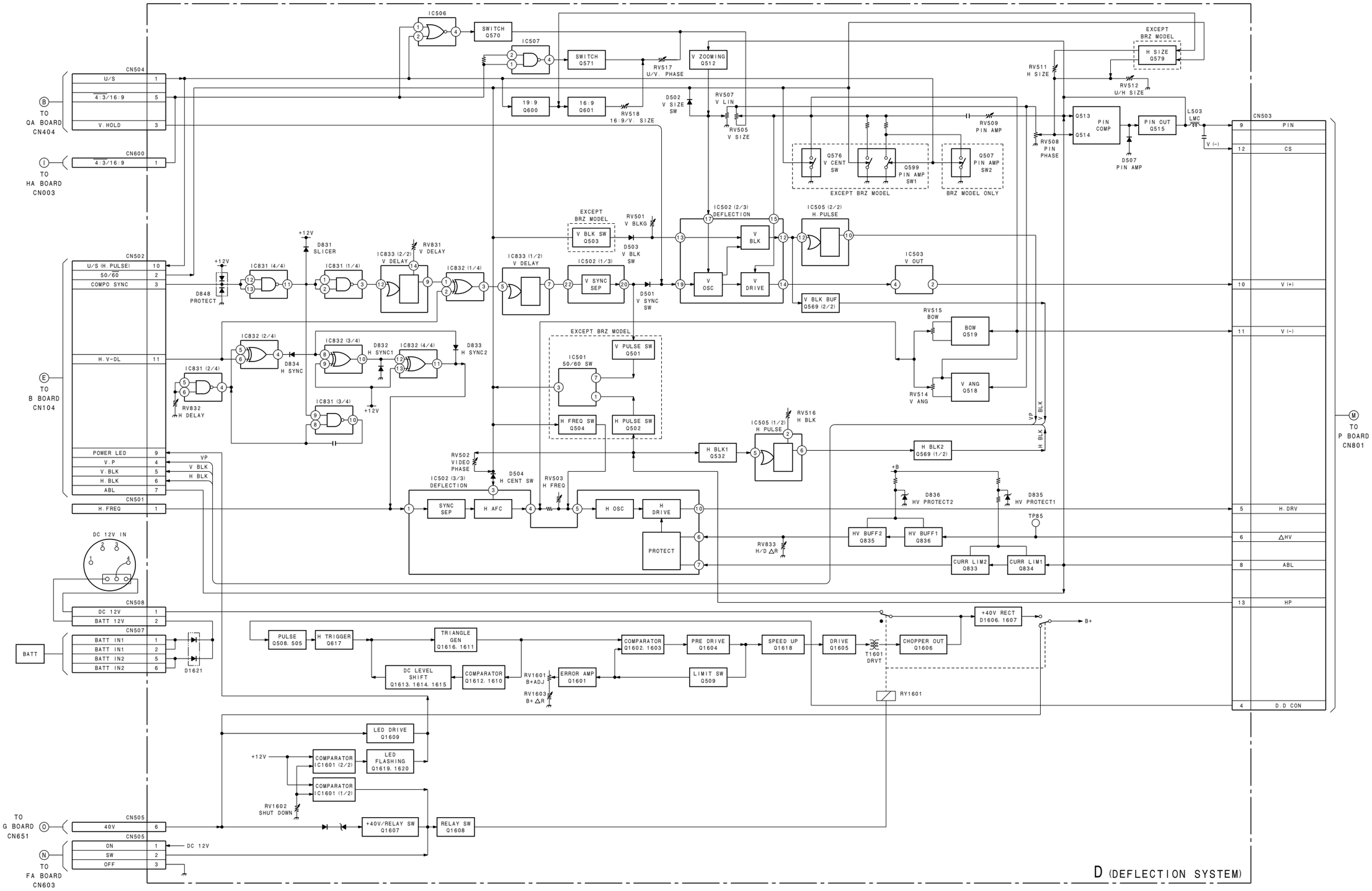
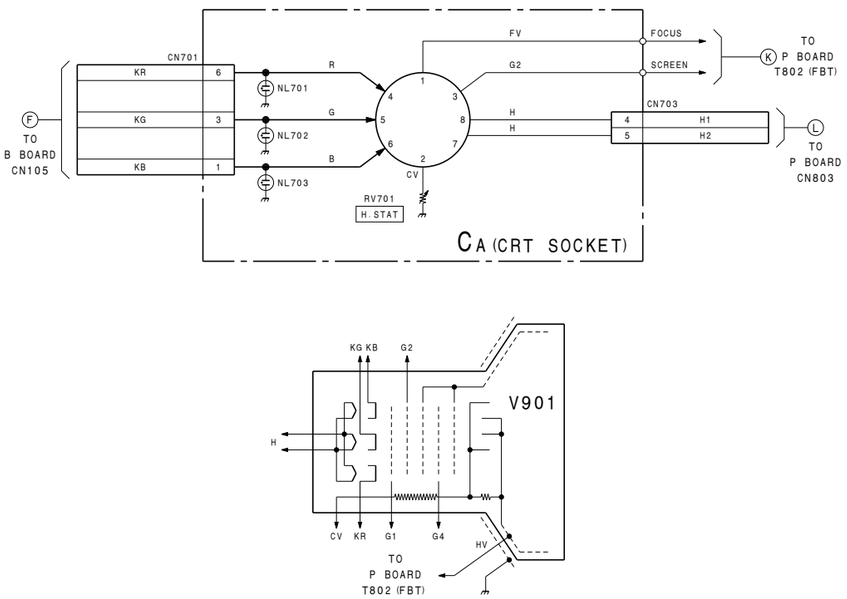
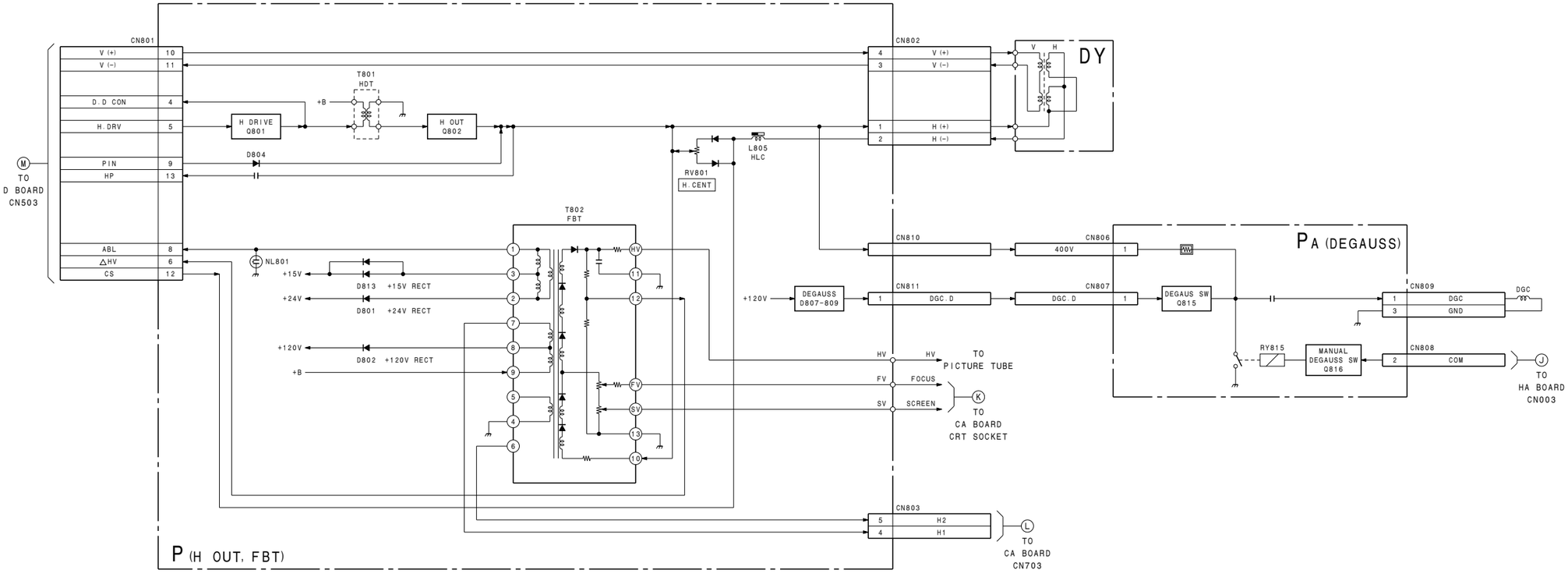
VCA
Y BUFF Q204
B-Y BUFF Q205
R-Y BUFF Q206
G BUFF Q202
B BUFF Q201
R BUFF Q203
B/W SW Q144
MODE SW Q145
D289 RGB SW
RV123 MATRIX R-Y LEVEL
MATRIX
COMP/RGB
OSD
R GAIN CONT
G GAIN CONT
B GAIN CONT
R C/O CONT
G C/O CONT
B C/O CONT
R BUFF Q165
G BUFF Q166
B BUFF Q167
TP104
SLICER D133-135
BLACK SLICE REF Q153
BLUE ONLY SW Q212
B BUFF Q168
IC125 BLACK SAMPLING
IC127 HOLD
RV124 BL ONLY W/B-R
RV125 BL ONLY W/B-G
BL-ONLY-RCH-BUFF Q170
BL-ONLY-GCH-BUFF Q172
IC126 BL-ONLY Y SW
R BUFF Q173
G BUFF Q174
B BUFF Q175
IC116 H-BLK-SW
D144 BLANKING
D145 BLANKING
D146 BLANKING
R DRIVE Q157
G DRIVE Q158
B DRIVE Q159
R REF PULSE SW Q148
G REF PULSE SW Q151
B REF PULSE SW Q154
R-E F Q149.209
G-E F Q152.210
B-E F Q155.211
CN105
F TO CA BOARD CN701
MUTE
H-BLK
REF PULSE SW Q160
PULSE SW Q109
V GATE SW Q146.147
RV115 SUB HUE
RV116 SUB COL
RV205 SUB SHARP
APT COL
Y BLK SW Q164
REF PULSE BUFF Q161
V BLK SW Q179
BLANKING Q177
D162 SW
BRT PIX VP HP CLP R GAIN G GAIN B GAIN R BIAS G BIAS B BIAS
RV120 G GAIN
RV122 B GAIN
RV119 G C/O
RV121 B C/O
D188 SW
CN106
A-H/B-L
EXT-H
G TO HA BOARD CN002
B-Y/B
R-Y/R
PULSE-2
TINT
D151 SW
+12V
SW D152.153 C316
IC129 ON/OFF MUTE
OFF MUTE SW Q299
RGB/LINE
CLP-2
CLP-1
HV-DL
RV118 SUB BRT
APT. COL. TINT
D125 SW
D147 V-BLK SW
UNDER-H
HV-DLY
APT
COL
TINT
VOL
P-LED
CN107
H TO HA BOARD CN001
RGB-H
B/W
D127 SW
D128 SW
PIX/BRT ABL Q189
D1401 SW
IC1401 U/B-SW
HV-DL V-BLK H-BLK UNDER-H P-LED ABL VP
A-H/B-L B ONLY BLUE-L EXT-H VOL
B ONLY
H-BLK
V-BLK
EXT-H A-H/B-L VOL
PULSE-1
PULSE-2
BRZ MODEL ONLY
B (SIGNAL PROCESS)


CN101
SECAM 3
R-Y OUT 9
B-Y OUT 8
DL-IN (SIG) 1
DL-IN (COM) 2
C-IN 6
BGP 11
(DLY) HP 12
LIM-OUT 4
SECAM OFF 7
D
TO
B BOARD
CN103
INPUT BUFF Q1101
BUFF Q1102
ID ATT SW Q1108
ID ATT Q1107
T1101
BELL FILTER
SECAM OFF SW Q1106
IC1101
SECAM DEMODULATOR
D IN
D IN
IN
BG
HP
COL
R-Y
B-Y
ACK
OUT
RV1102
SEL-COL (R-Y)
R-Y BUFF Q1103
B-Y BUFF Q1104
SECAM SW Q1105
L1102
DISCR (R-Y)
L1103
DISCR (B-Y)
RV1101
SEL COL
+5V
S (SECAM DEMODULATOR)


AC IN
CN403
AC SW
AC SW
CN601
AC SW
AC SW
F601
S601
POWER
CN602
AC OUT
AC OUT
CN603
ON
SW
OFF
DC SW1
DC SW2
DC SW3
N
TO
D BOARD
CN505
QA (2/2)
FA (AC/DC SW)
L601, 602
LFT
D601
AC RECT
T601
SRT
D201, 651
B+ RECT
CN651
+40V
O
TO
D BOARD
CN505
IC601
POWER CONT
OUT
OCP
OVP
F/B
REG OUT
Q601
D605
D604
PH601
ISOLATION
IC651
SHUNT REG
RV651
B+ADJ
G (SWITCHING REGULATOR)

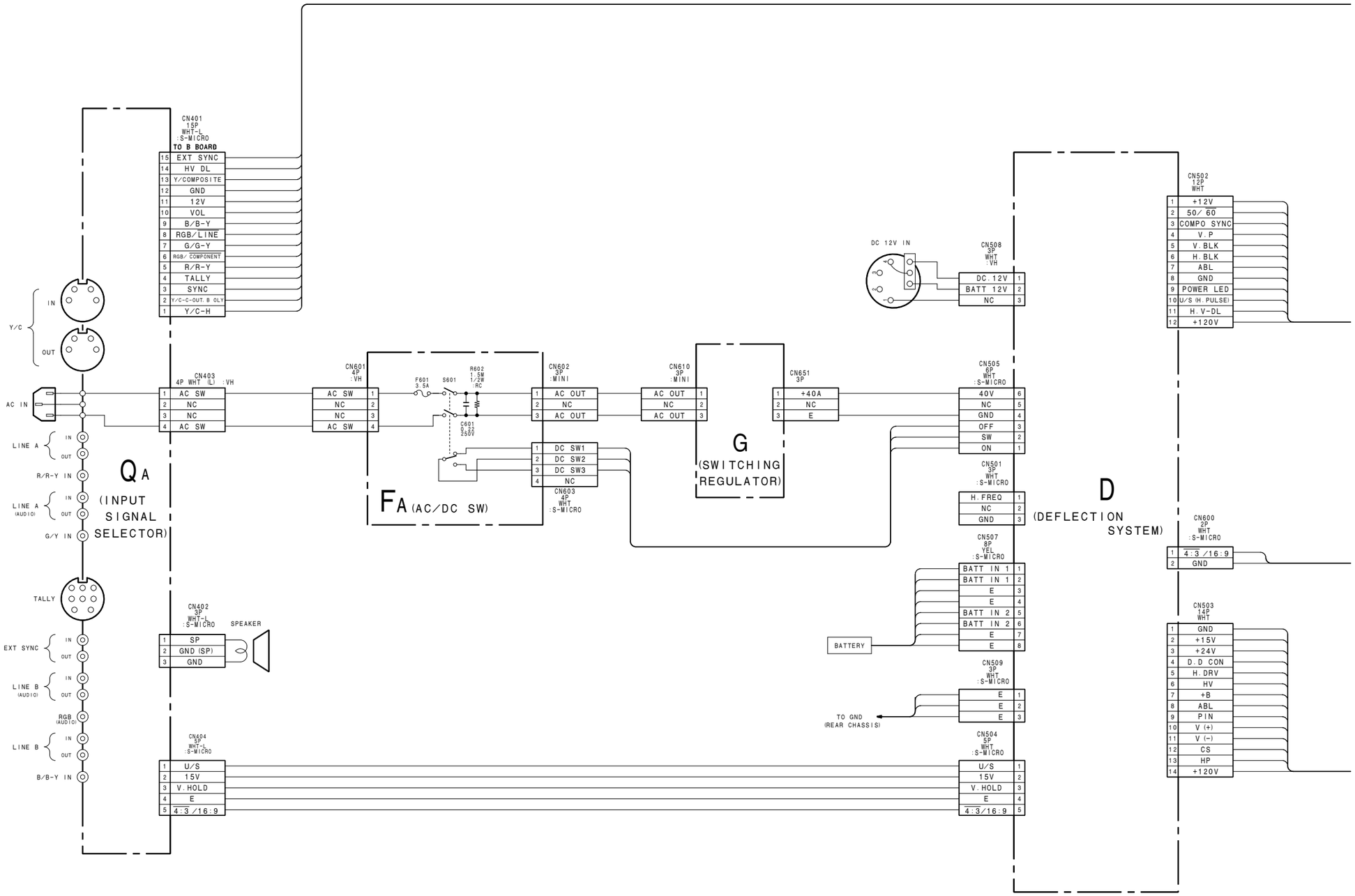

CN504
U/S 1
4:3/16:9 5
V.HOLD 3
CN600
4:3/16:9 1
TO QA BOARD CN404
TO HA BOARD CN003
CN502
U/S (H.PULSE) 10
50/60 2
COMPO SYNC 3
H.V-DL 11
POWER LED 9
V.P 4
V.BLK 5
H.BLK 6
ABL 7
CN501
H.FREQ 1
TO B BOARD CN104
VP
V BLK
H BLK
DC 12V IN
CN508
DC 12V 1
BATT 12V 2
CN507
BATT IN1 1
BATT IN1 2
BATT IN2 5
BATT IN2 6
BATT
D1621
CN505
40V 6
CN505
ON 1
SW 2
OFF 3
DC 12V
TO G BOARD CN651
TO FA BOARD CN603
IC506
SWITCH Q570
IC507
SWITCH Q571
RV517 U/V. PHASE
V ZOOMING Q512
19:9 Q600
16:9 Q601
RV518 16:9/V. SIZE
D502 V SIZE SW
RV507 V LIN
RV505 V SIZE
RV509 PIN AMP
Q576 V CENT SW
Q599 PIN AMP SW1
EXCEPT BRZ MODEL
Q507 PIN AMP SW2
BRZ MODEL ONLY
RV508 PIN PHASE
Q513 PIN COMP
Q514
PIN OUT Q515
D507 PIN AMP
L503 LMC
V (-)
EXCEPT BRZ MODEL
H SIZE Q579
RV511 H SIZE
RV512 U/H SIZE
CN503
9 PIN
12 CS
10 V (+)
11 V (-)
5 H.DRV
6 △HV
8 ABL
13 HP
4 D.D CON
TO P BOARD CN801
+12V
D831 SLICER
IC831 (4/4)
IC831 (1/4)
IC833 (2/2) V DELAY
RV831 V DELAY
IC832 (1/4)
IC833 (1/2) V DELAY
EXCEPT BRZ MODEL
V BLK SW Q503
RV501 V BLKG
IC502 (2/3) DEFLECTION
IC505 (2/2) H.PULSE
D503 V BLK SW
IC502 (1/3) V SYNC SEP
V BLK
V OSC
V DRIVE
IC503 V OUT
V BLK BUF Q569 (2/2)
D848 PROTECT
D501 V SYNC SW
IC832 (2/4)
IC832 (3/4)
D832 H SYNC1
IC832 (4/4)
D833 H SYNC2
D834 H SYNC
IC831 (2/4)
IC831 (3/4)
RV832 H DELAY
EXCEPT BRZ MODEL
V PULSE SW Q501
IC501 50/60 SW
H FREQ SW Q504
H PULSE SW Q502
RV515 BOW
BOW Q519
RV514 V ANG
V ANG Q518
RV516 H BLK
IC505 (1/2) H PULSE
H BLK1 Q532
H BLK2 Q569 (1/2)
RV502 VIDEO PHASE
D504 H CENT SW
IC502 (3/3) DEFLECTION
RV503 H FREQ
SYNC SEP
H AFC
H OSC
H DRIVE
PROTECT
+B
D836 HV PROTECT2
D835 HV PROTECT1
TP85
HV BUFF2 Q835
HV BUFF1 Q836
RV833 H/D △R
CURR LIM2 Q833
CURR LIM1 Q834
PULSE Q508. 505
H TRIGGER Q617
TRIANGLE GEN Q1616. 1611
DC LEVEL SHIFT Q1613. 1614. 1615
COMPARATOR Q1612. 1610
RV1601 B+ADJ
RV1603 B+ △R
ERROR AMP Q1601
COMPARATOR Q1602. 1603
PRE DRIVE Q1604
LIMIT SW Q509
SPEED UP Q1618
DRIVE Q1605
T1601 DRVT
CHOPPER OUT Q1606
+40V RECT D1606. 1607
B+
RY1601
LED DRIVE Q1609
LED FLASHING Q1619. 1620
COMPARATOR IC1601 (2/2)
COMPARATOR IC1601 (1/2)
RV1602 SHUT DOWN
+40V/RELAY SW Q1607
RELAY SW Q1608
D (DEFLECTION SYSTEM)

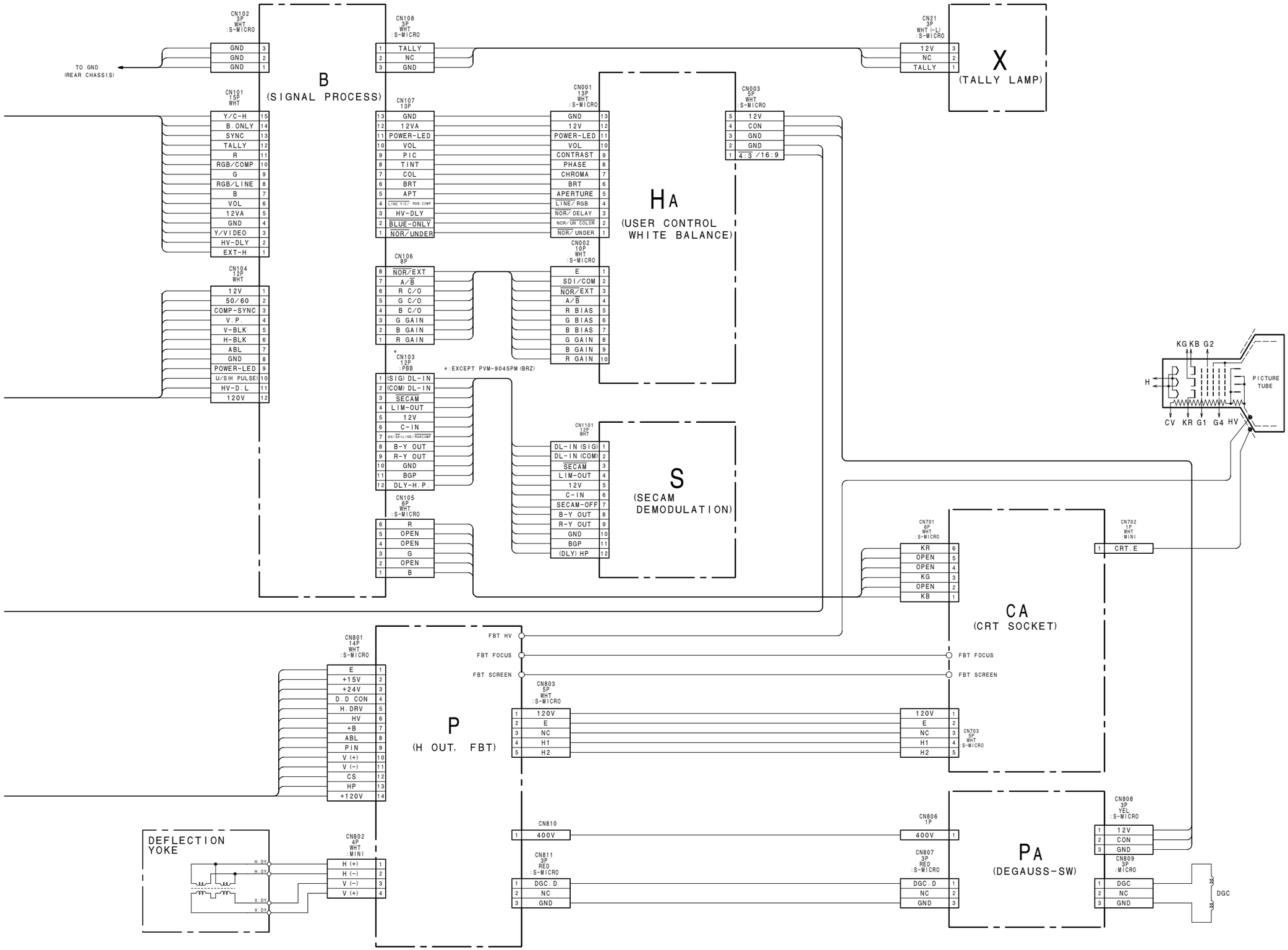

CN701
KR 6
KG 3
KB 1
NL701
NL702
NL703
R
G
B
FV
G2
CV
RV701
H. STAT
FOCUS
SCREEN
TO
P BOARD
T802 (FBT)
CN703
H1
H2
TO
P BOARD
CN803
TO
B BOARD
CN105
CA (CRT SOCKET)
KG KB
G2
V901
H
CV KR G1 G4
HV
TO
P BOARD
T802 (FBT)


CN801
V (+) 10
V (−) 11
D. D CON 4
H. DRV 5
PIN 9
HP 13
ABL 8
△HV 6
CS 12
TO
D BOARD
CN503
T801
HDT
+B
H DRIVE
Q801
H OUT
Q802
D804
RV801
H. CENT
L805
HLC
CN802
V (+) 4
V (−) 3
H (+) 1
H (−) 2
V H
DY
T802
FBT
NL801
+15V
+24V
+120V
+B
D813 +15V RECT
D801 +24V RECT
D802 +120V RECT
CN810
CN806
400V 1
CN811
DGC. D 1
CN807
DGC. D 1
DEGAUSS
D807-809
DEGAUS SW
Q815
PA (DEGAUSS)
CN809
DGC 1
GND 3
DGC
RY815
MANUAL
DEGAUSS SW
Q816
CN808
COM 2
TO
HA BOARD
CN003
HV
FV
SV
FOCUS
SCREEN
TO
PICTURE TUBE
TO
CA BOARD
CRT SOCKET
CN803
H2 5
H1 4
TO
CA BOARD
CN703
P (H OUT, FBT)

SECTION 10
DIAGRAMS

10-1. FRAME SCHEMATIC DIAGRAMS




CN102 3P WHT :S-MICRO
GND 3
GND 2
GND 1
TO GND (REAR CHASSIS)
B (SIGNAL PROCESS)
CN101 15P WHT
Y/C-H 15
B.ONLY 14
SYNC 13
TALLY 12
R 11
RGB/COMP 10
G 9
RGB/LINE 8
B 7
VOL 6
12VA 5
GND 4
Y/VIDEO 3
HV-DLY 2
EXT-H 1
CN104 12P WHT
12V 1
50/60 2
COMP-SYNC 3
V.P. 4
V-BLK 5
H-BLK 6
ABL 7
GND 8
POWER-LED 9
U/S(H PULSE) 10
HV-D.L 11
120V 12
CN108 3P WHT :S-MICRO
1 TALLY
2 NC
3 GND
CN21 3P WHT(-L) :S-MICRO
12V 3
NC 2
TALLY 1
X (TALLY LAMP)
CN107 13P
13 GND
12 12VA
11 POWER-LED
10 VOL
9 PIC
8 TINT
7 COL
6 BRT
5 APT
4 LINE/Y/C/ RGB.COMP
3 HV-DLY
2 BLUE-ONLY
1 NOR/UNDER
CN001 13P WHT :S-MICRO
GND 13
12V 12
POWER-LED 11
VOL 10
CONTRAST 9
PHASE 8
CHROMA 7
BRT 6
APERTURE 5
LINE/RGB 4
NOR/DELAY 3
NOR/UN COLOR 2
NOR/UNDER 1
CN003 5P WHT :S-MICRO
5 12V
4 CON
3 GND
2 GND
1 4:3 /16:9
HA (USER CONTROL WHITE BALANCE)
CN106 8P
8 NOR/EXT
7 A/B
6 R C/O
5 G C/O
4 B C/O
3 G GAIN
2 B GAIN
1 R GAIN
CN002 10P WHT :S-MICRO
E 1
SDI/COM 2
NOR/EXT 3
A/B 4
R BIAS 5
G BIAS 6
B BIAS 7
G GAIN 8
B GAIN 9
R GAIN 10
*
CN103 12P :PBB
*:EXCEPT PVM-9045PM(BRZ)
1 (SIG) DL-IN
2 (COM) DL-IN
3 SECAM
4 LIM-OUT
5 12V
6 C-IN
7 60/50+LINE/RGBCOMP
8 B-Y OUT
9 R-Y OUT
10 GND
11 BGP
12 DLY-H.P.
CN1101 12P WHT
DL-IN (SIG) 1
DL-IN (COM) 2
SECAM 3
LIM-OUT 4
12V 5
C-IN 6
SECAM-OFF 7
B-Y OUT 8
R-Y OUT 9
GND 10
BGP 11
(DLY) HP 12
S (SECAM DEMODULATION)
CN105 6P WHT :S-MICRO
6 R
5 OPEN
4 OPEN
3 G
2 OPEN
1 B
KG KB G2
H
CV KR G1 G4 HV
PICTURE TUBE
CN701 6P WHT :S-MICRO
KR 6
OPEN 5
OPEN 4
KG 3
OPEN 2
KB 1
CN702 1P WHT :MINI
1 CRT.E
CA (CRT SOCKET)
CN801 14P WHT :S-MICRO
E 1
+15V 2
+24V 3
D.D CON 4
H.DRV 5
HV 6
+B 7
ABL 8
PIN 9
V(+) 10
V(-) 11
CS 12
HP 13
+120V 14
FBT HV
FBT FOCUS
FBT SCREEN
P (H OUT, FBT)
CN803 5P WHT :S-MICRO
1 120V
2 E
3 NC
4 H1
5 H2
CN703 5P WHT :S-MICRO
DEFLECTION YOKE
H.DY
H.DY
V.DY
V.DY
CN802 4P WHT :MINI
H(+) 1
H(-) 2
V(-) 3
V(+) 4
CN810
1 400V
CN811 3P RED :S-MICRO
1 DGC.D
2 NC
3 GND
CN806 1P
400V 1
CN807 3P RED :S-MICRO
DGC.D 1
NC 2
GND 3
PA (DEGAUSS-SW)
CN808 3P YEL :S-MICRO
1 12V
2 CON
3 GND
CN809 3P :MICRO
1 DGC
2 NC
3 GND
DGC

10-2. SCHEMATIC DIAGRAMS/PRINTED WIRING BOARDS

Note:

- All capacitors are in μF unless otherwise noted.
  PF: 50 WV or less are not indicated except for electorlytics.
- All electrolytics are in 50 V unless otherwise specified.
- All resistors are in ohms, 1/4 W in resistance, 1/10 W in chip resistance.
  kΩ = 100, MΩ = 1000 kΩ
- PWW : nonflammable resistor.
- △ : internal component.
- ▭ : panel designation, or adjustment for repair.
- All variable and adjustable resistors have characteristic curve B, unless otherwise noted.
- The "4-1. +B Voltage Check" and "4-2. Protection Circuit (Hold-down circuit) Check" should always be performed when replacing the following components (marked ◪ on the schematic diagram).

Board	◪ Parts	⧓ Parts
D	C519, C843, C844, C845, C846, C847, C848, C1601, C1602, D835, D836, D1601, D1603, IC502, Q833, Q834, Q835, Q836, Q1601, Q1602, Q1603, R523, R850, R851, R852, R853, R854, R855, R856, R857, R858, R859, R860, R861, R862, R863, R1601, R1602, R1603, R1604, R1605, R1606, R1607, R1608, R1628, R1629, R1630, RV833, RV1601, RV1603	RV833, RV1603
G	C654, IC601, IC651, PH601, R653, R655, R656, R657, RV651	RV651
P	C814, NL801, T802 (FBT)	

- Readings are taken with a color-bar signal input.
  no mark : With PAL color-ber signal receved or common voltage.
  ( ) : With SECAM color-ber signal receved.
  < > : With NTSC (3.58, 4.43) color-ber signal receved.
- Readings are taken with a 10 MΩ digital multimeter.
- Voltage are dc with respect to ground unless otherwise noted.
- Voltage variations may be noted due to normal production tolerances.
- All voltages are in V.
- Circled numbers are waveform reference.
- V▽ : B+ bus.
- V▽ : B– bus.
- ⇨ : signal path.
- * : Measurement impossibility.

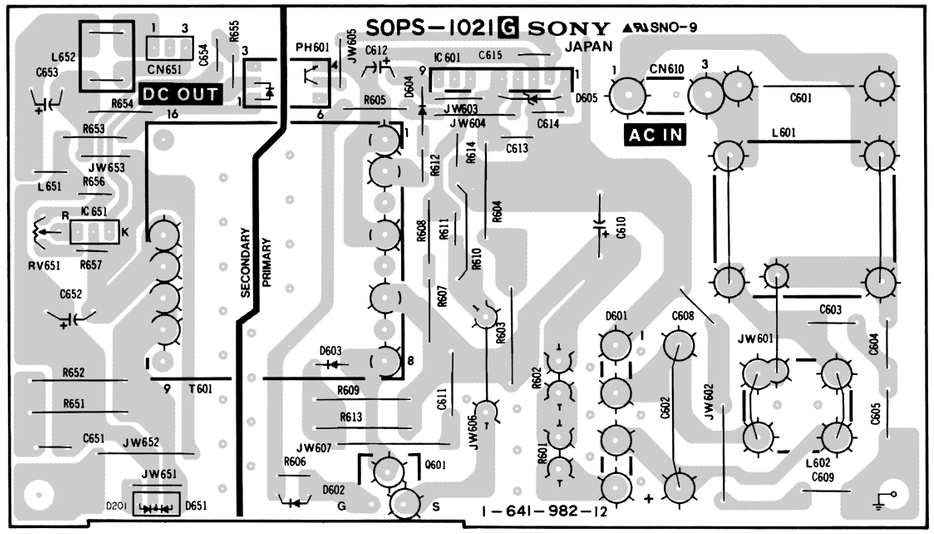
The components identified by mark ⚠ are critical for safety. Replace only with part number specified.

Les composants identifies par une marque ⚠ sont critiques pour la securite. Ne les remplacer que par une piece portant le numero specifie.

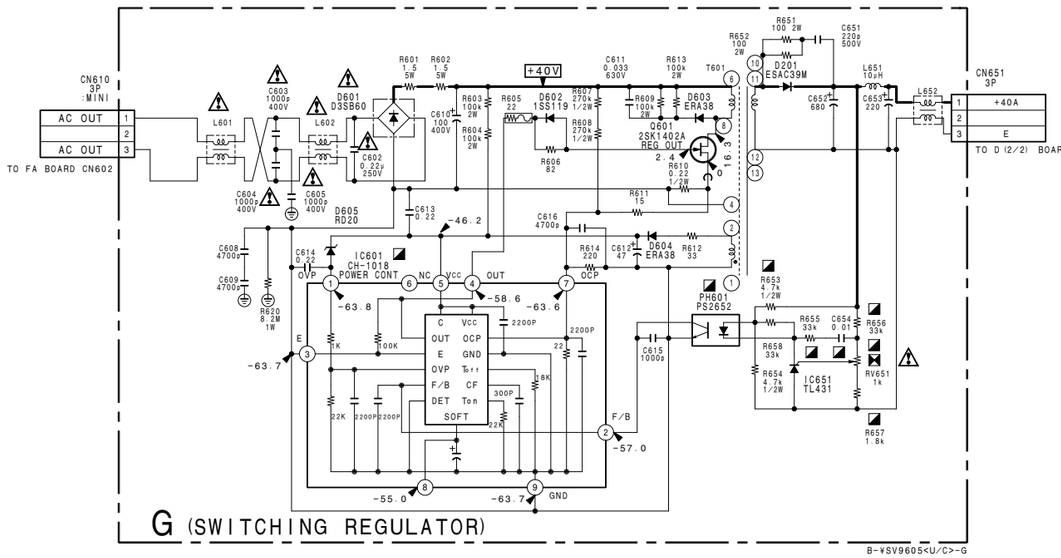
Reference information

RESISTOR	: RN METAL FILM
	: RC SOLID
	: FPRD NONFLAMMABLE CARBON
	: FUSE NONFLAMMABLE FUSIBLE
	: RS NONFLAMMABLE METAL OXIDE
	: RB NONFLAMMABLE CEMENT
	: RW NONFLAMMABLE WIREWOUND
COIL	: LF-8L MICRO INDUCTOR
CAPACITOR	: TA TANTALUM
	: PS STYROL
	: PP POLYPROPYLENE
	: PT MYLAR
	: MPS METALIZED POLYESTER
	: MPP METALIZED POLYPROPYLENE
	: ALB BIPOLAR
	: ALT HIGH TEMPERATURE
	: ALR HIGH RIPPLE

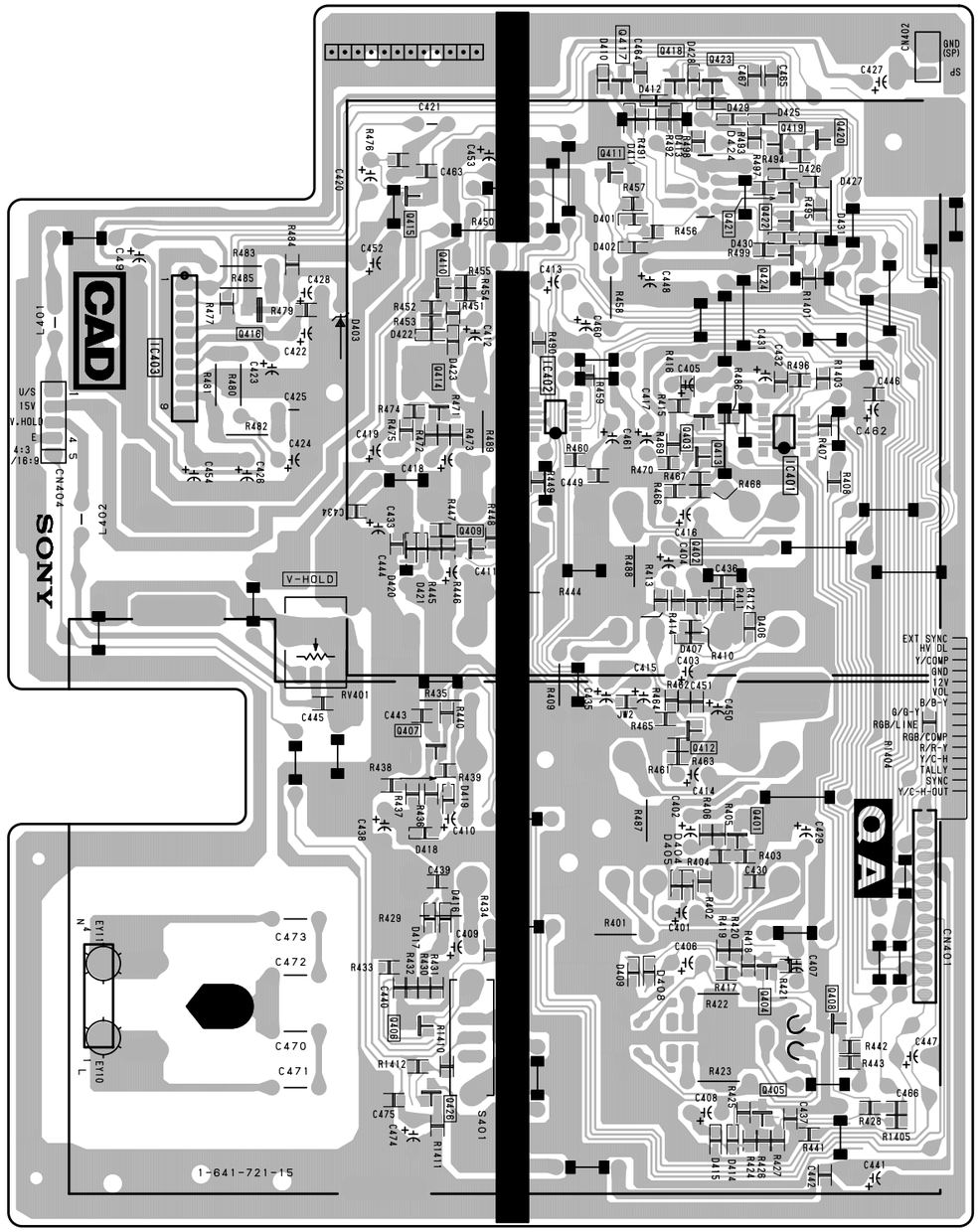
G BOARD



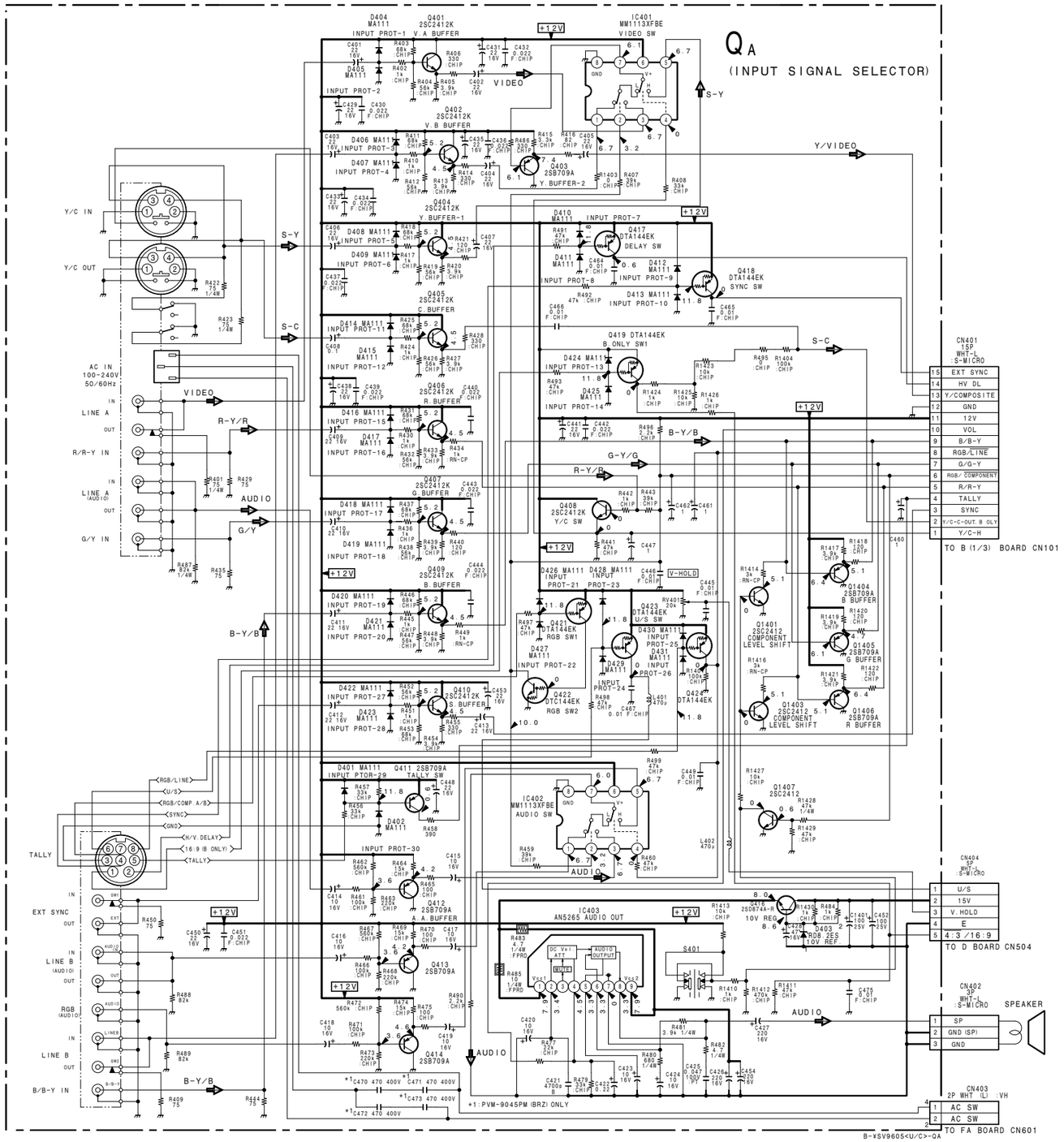
G -B SIDE-
SUFFIX: -12



QA BOARD



QA -B SIDE-
SUFFIX: -15

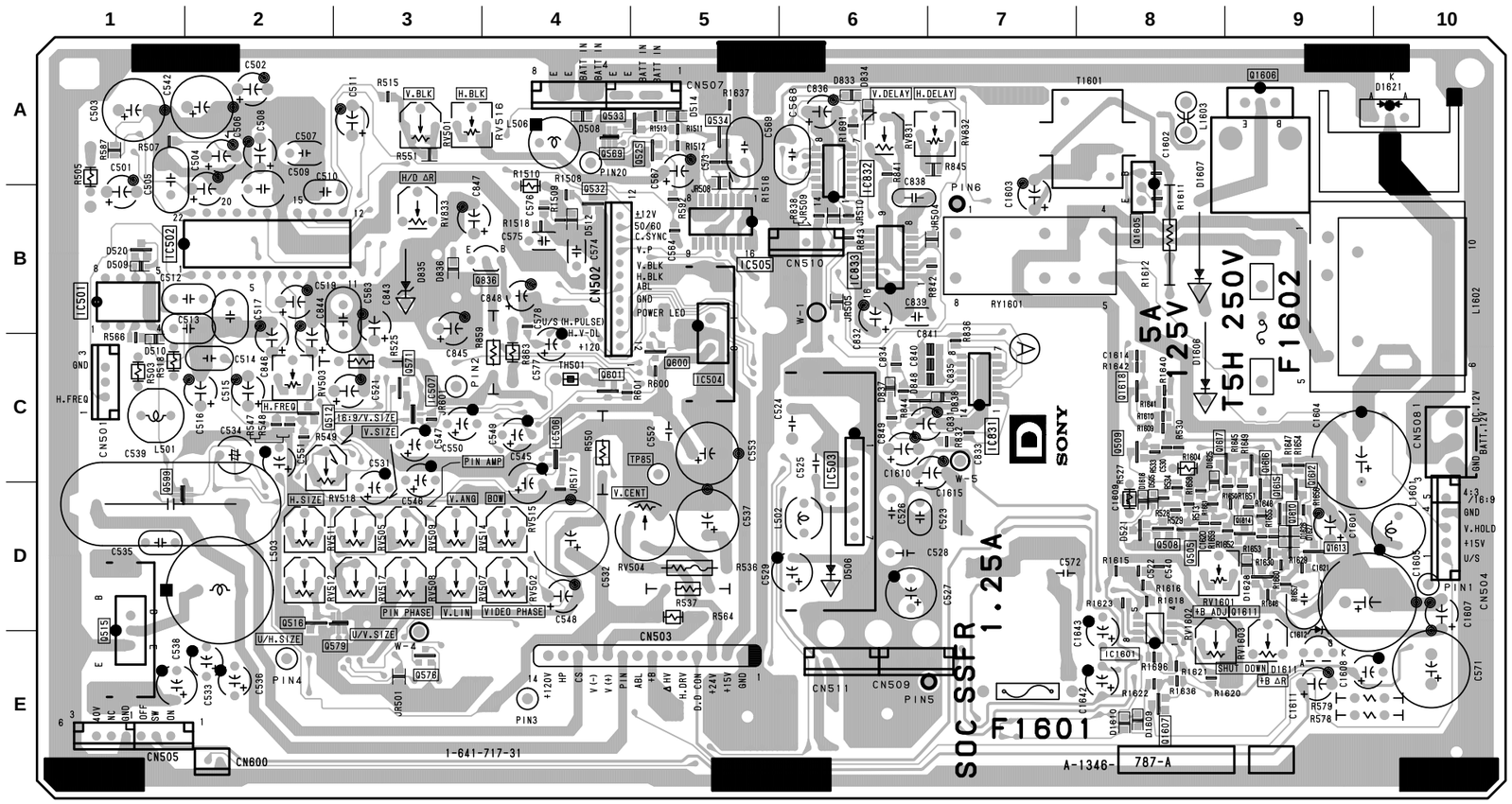


S MIC Chassis

10-5 10-5

A B C D E F G H

D BOARD



D -A SIDE-
SUFFIX: -31

D BOARD (A SIDE)

IC501 B-1
IC502 B-1
IC503 C-6
IC505 B-5
IC506 C-4
IC507 C-3
IC831 C-7
IC832 A-6
IC833 B-6
IC1601 E-8

Q505 D-8
Q508 D-8
Q509 C-8
Q512 C-2
Q515 D-1
Q516 D-2
Q532 B-4
Q533 A-4
Q534 A-5
Q569 A-4
Q571 C-3
Q576 E-3
Q579 E-3
Q525 A-5
Q599 D-1
Q600 C-5
Q601 C-4
Q836 B-4
Q1604 C-2
Q1605 B-8
Q1606 A-9
Q1607 E-8
Q1610 D-9
Q1611 D-9
Q1612 C-9
Q1613 D-9
Q1614 D-9
Q1615 D-9
Q1616 C-9
Q1617 C-8
Q1618 C-8

D506 D-5
D508 A-4
D509 B-1
D510 C-1
D514 A-5
D520 B-1
D521 D-8
D833 A-6
D834 A-6
D835 B-3
D836 B-3
D837 C-6
D838 C-7
D1606 C-8
D1607 A-8
D1609 E-8
D1611 E-9
D1616 D-8
D1621 A-10
D1625 C-8
D1626 D-9
D1627 D-9
D1628 D-9

RV501 A-3
RV502 D-4
RV503 C-2
RV504 D-5
RV505 D-3
RV507 D-4
RV508 D-3
RV509 D-3
RV511 D-2
RV512 D-2
RV514 D-4
RV515 D-4
RV516 A-4
RV517 D-3
RV518 C-2
RV831 A-6
RV832 A-7
RV833 B-3
RV1601 D-8
RV1602 E-8
RV1603 E-9

D BOARD (B SIDE)

IC501 B-10
IC502 B-9
IC503 C-5
IC504 C-6

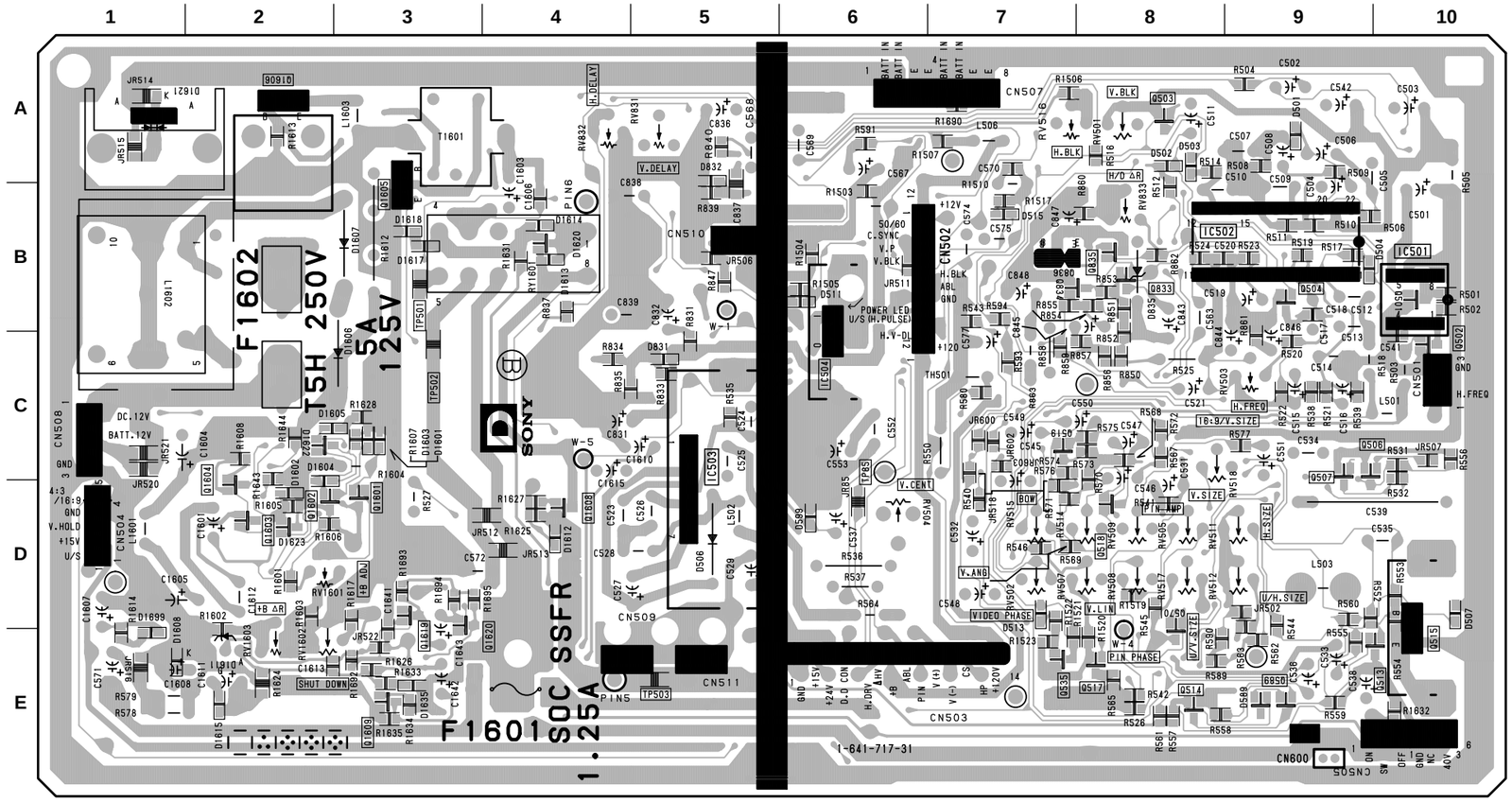
Q501 B-10
Q502 C-10
Q503 A-8
Q504 B-9
Q506 C-9
Q515 E-10
Q507 C-9
Q513 E-10
Q514 E-8
Q517 E-8
Q518 D-8
Q519 C-7
Q535 E-8
Q570 D-8
Q589 E-9
Q833 B-8
Q835 B-8
Q836 B-7
Q1601 D-3
Q1602 D-2
Q1603 D-2
Q1605 B-3
Q1606 A-2
Q1608 D-4
Q1609 E-3
Q1619 E-3
Q1620 E-4

D501 A-9
D502 A-8
D503 A-8
D504 B-9
D505 D-8
D507 D-7
D511 B-6
D512 B-4
D513 D-7
D515 B-7
D589 E-9
D599 D-6
D831 C-5
D832 A-5
D835 B-8
D1601 C-3
D1602 D-2
D1603 C-3
D1604 C-2
D1605 C-2
D1608 E-1
D1610 E-8
D1611 E-2
D1612 D-4
D1613 B-4
D1614 B-4
D1615 E-2
D1617 B-3
D1618 B-3
D1620 B-4
D1621 A-2
D1622 C-2
D1623 D-2
D1635 E-3
D1699 E-1

RV501 A-8
RV502 D-7
RV503 C-8
RV504 D-6
RV505 D-8
RV507 D-7
RV508 D-8
RV509 D-8
RV511 D-8
RV512 D-8
RV514 D-7
RV515 D-7
RV516 A-7
RV517 D-8
RV518 C-8
RV831 A-5
RV832 A-4
RV833 B-8
RV1601 D-2
RV1602 E-2
RV1603 E-2

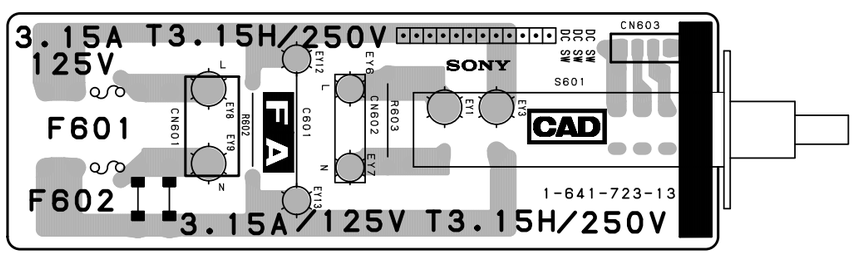
TP501 B-3
TP502 C-3
TP503 E-5

D BOARD

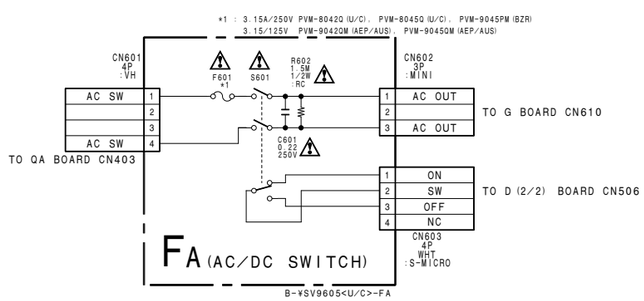


D -B SIDE-
SUFFIX: -31

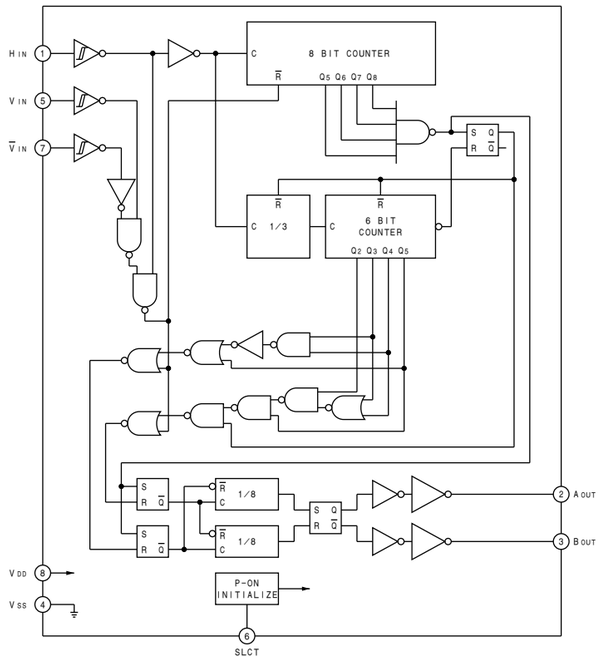
FA BOARD



FA -B SIDE-
SUFFIX: -13



D (1/2) BOARD IC501 CX23025



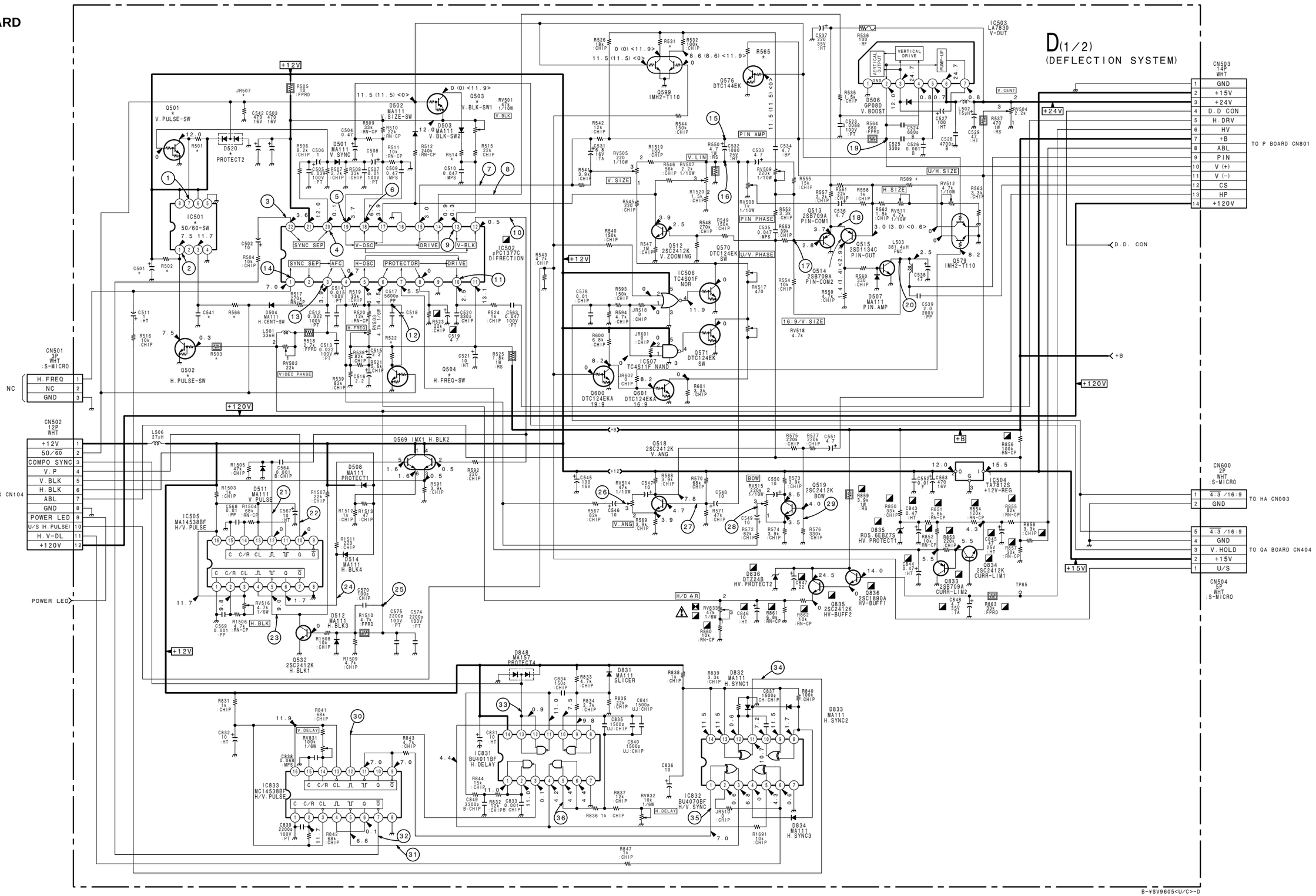
D (1/2) BOARD WAVEFORMS

① 12 V p-p (V)	② 12 V p-p (H)	③ 0.25 V p-p (V)	④ 0.67 V p-p (V)
⑤ 3.8 V p-p (V)	⑥ 3.3 V p-p (V)	⑦ 1.5 V p-p (V)	⑧ 1.4 V p-p (V)
⑨ 6.7 V p-p (V)	⑩ 11.5 V p-p (V)	⑪ 6.1 V p-p (H)	⑫ 4.4 V p-p (H)
⑬ 1.1 V p-p (H)	⑭ 6.8 V p-p (H)	⑮ 3.2 V p-p (V)	⑯ 2.9 V p-p (V)
⑰ 1 V p-p (V)	⑱ 1 V p-p (H)	⑲ 49 V p-p (V)	⑳ 1.2 V p-p (V)
㉑ 12 V p-p (V)	㉒ 12 V p-p (H)	㉓ 12 V p-p (H)	㉔ 12 V p-p (H)
㉕ 32 V p-p (H)	㉖ 0.24 V p-p (V)	㉗ 2.8 V p-p (V)	㉘ 0.36 V p-p (H)
㉙ 0.6 V p-p (H)	㉚ 12 V p-p (V)	㉛ 12 V p-p (V)	㉜ 12 V p-p (V)
㉝ 12 V p-p (H)	㉞ 12 V p-p (H)	㉟ 12 V p-p (V)	㊱ 12 V p-p (H)

D (1/2) BOARD * MARK LIST

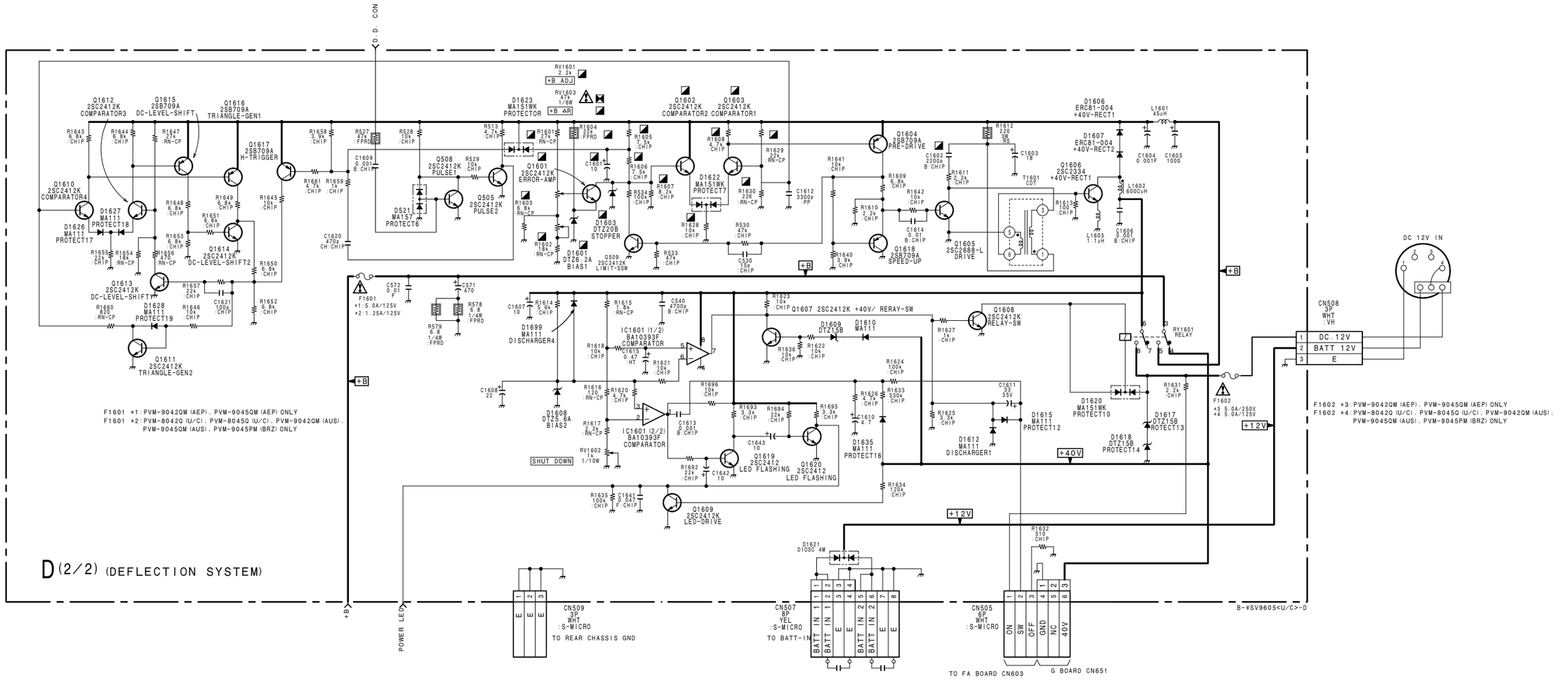
	PVM-8042Q (U/C) PVM-8045Q (U/C) PVM-9042QM (AEP/AUS) PVM-9045QM (AEP/AUS)	PVM-9045PM (BRZ)
C501	47 16V	NOT USED
C518	56P B: CHIP	NOT USED
C541	0.047 B: CHIP	NOT USED
D520	MA157-TX	NOT USED
IC501	CX23025	NOT USED
JR507	NOT USED	SHORT 0
Q501	DTC144EKA-T146	NOT USED
Q502	DTC144EKA-T146	NOT USED
Q503	DTC144EKA-T147	NOT USED
Q504	DTC144EKA-T146	NOT USED
R501	47K :CHIP	NOT USED
R502	47K :CHIP	NOT USED
R503	47K	NOT USED
R514	120K :RN	NOT USED
R522	270K :CHIP	NOT USED
R531	47K :CHIP	NOT USED
R565	2.7K CHIP	NOT USED
R566	100 :CHIP	NOT USED
R589	150K :CHIP	NOT USED

D (1/2) BOARD



S MIC Chassis

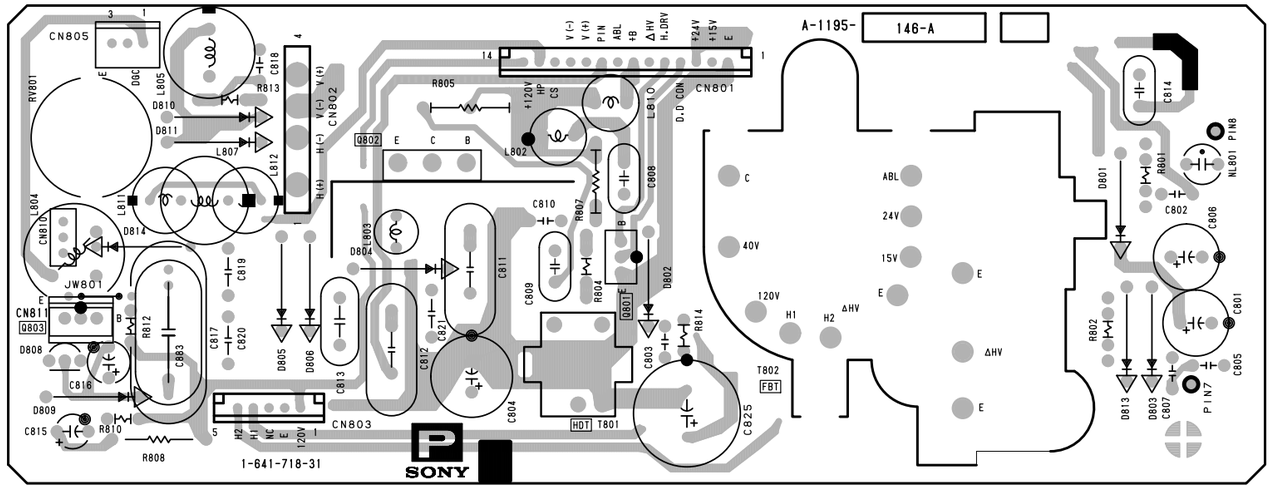
D (2/2) BOARD



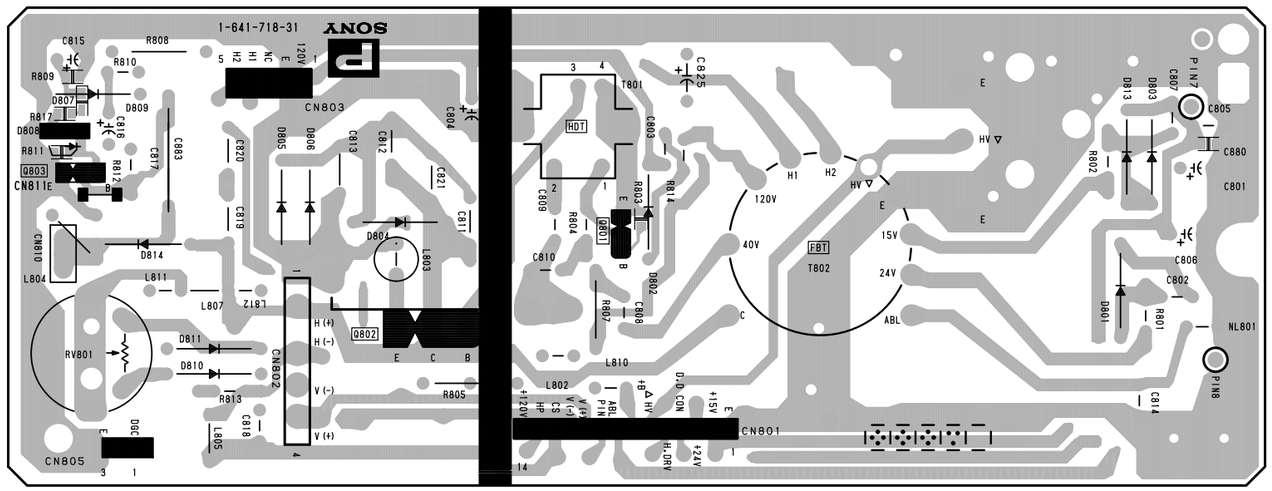
F1601 *1:PVM-9042QM (AEP), PVM-9045QM (AEP) ONLY
F1601 *2:PVM-8042Q (U/C), PVM-8045Q (U/C), PVM-9042QM (AUS), PVM-9045QM (AUS), PVM-9045PM (BRZ) ONLY

F1602 *3:PVM-9042QM (AEP), PVM-9045QM (AEP) ONLY
F1602 *4:PVM-8042Q (U/C), PVM-8045Q (U/C), PVM-9042QM (AUS), PVM-9045QM (AUS), PVM-9045PM (BRZ) ONLY

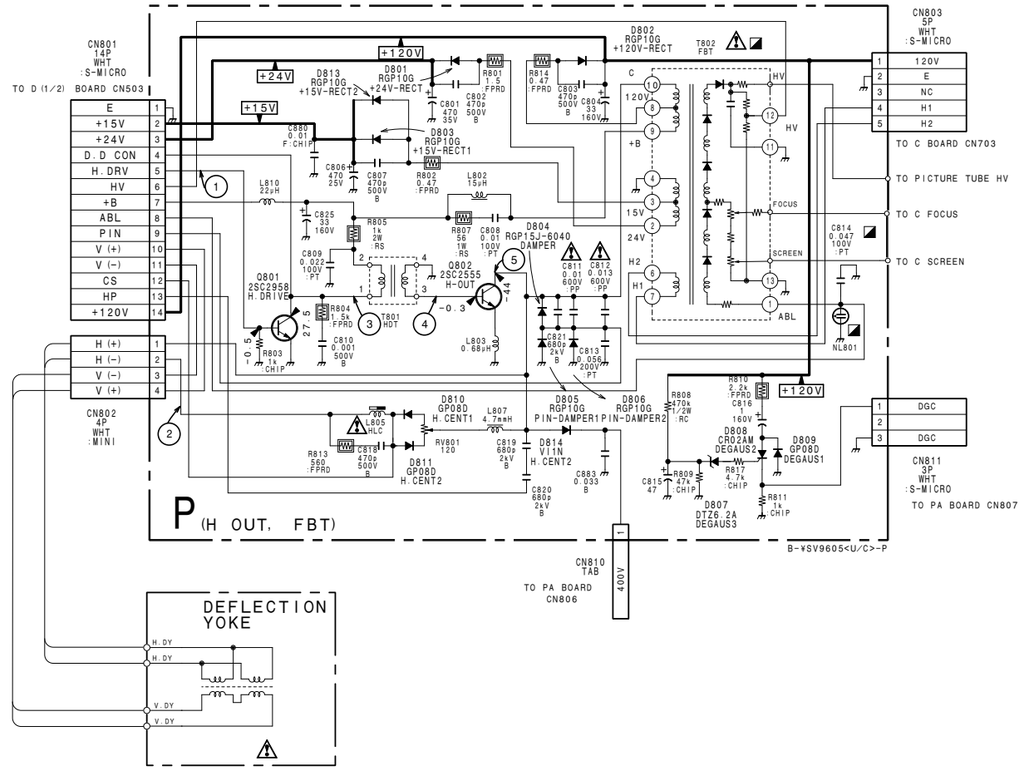
P BOARD



P -A SIDE-
SUFFIX: -31



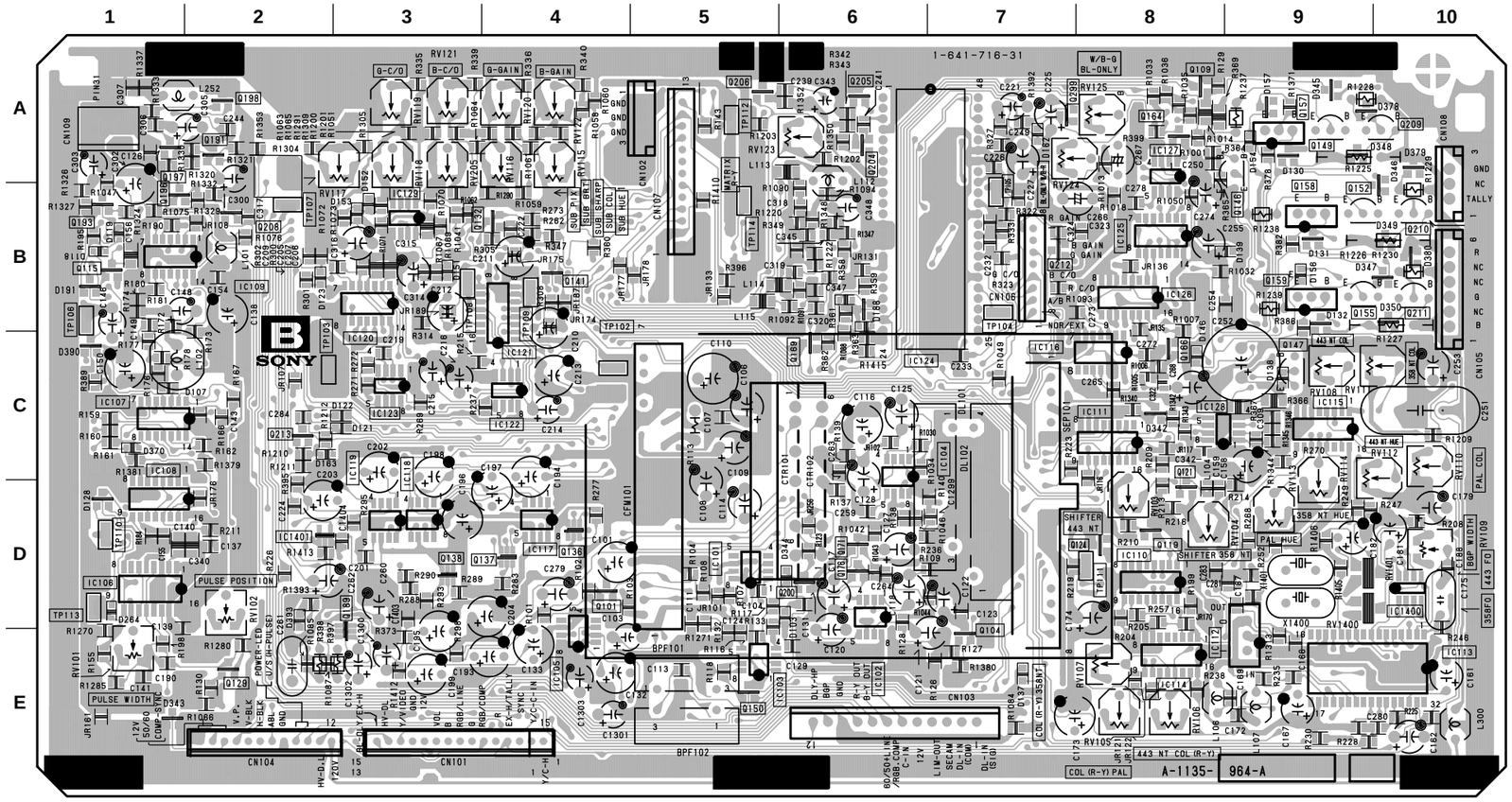
P -B SIDE-
SUFFIX: -31



P BOARD WAVEFORMS

① 2.2 V p-p (H)	② 70 V p-p (H)	③ 43 V p-p (H)
④ 17 V p-p (H)	⑤ 380 V p-p (H)	

B BOARD



B -A SIDE-
SUFFIX: -31

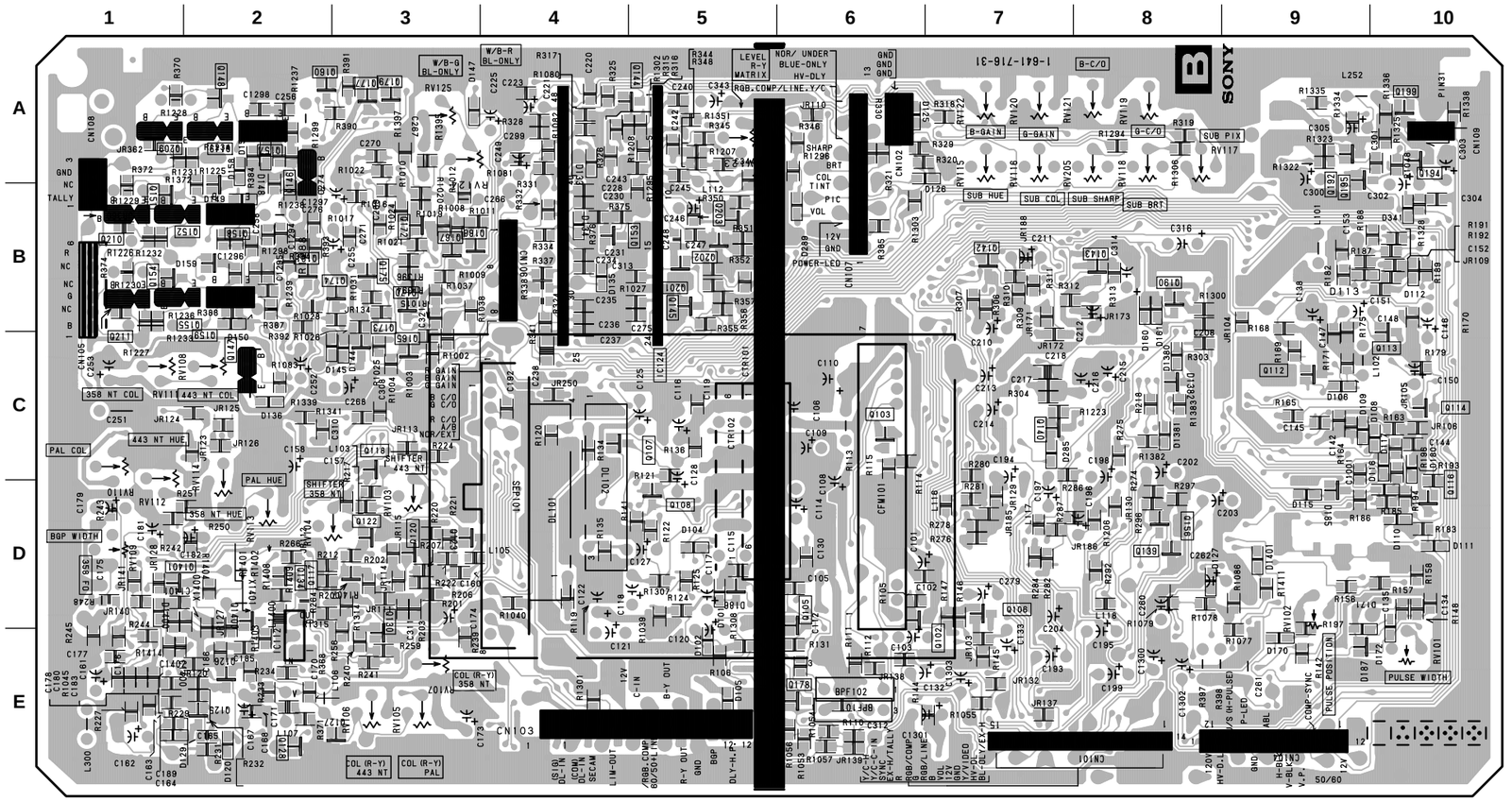
B Board (A SIDE)

IC501	B-1	D103	D-6
IC101	D-5	D107	C-2
IC102	E-6	D118	B-1
IC103	E-5	D119	B-1
IC104	C-7	D121	C-3
IC105	E-4	D122	C-3
IC106	D-1	D123	B-2
IC107	C-1	D128	D-1
IC108	C-1	D130	A-9
IC109	B-2	D131	B-9
IC110	D-8	D132	B-9
IC111	C-8	D137	E-7
IC112	E-8	D138	C-9
IC113	E-10	D139	B-9
IC114	E-8	D148	B-8
IC115	C-9	D151	B-3
IC117	D-4	D153	B-3
IC118	C-3	D154	A-9
IC118	C-7	D157	A-9
IC119	C-3	D158	B-9
IC120	C-3	D162	A-7
IC121	C-4	D163	C-2
IC122	C-4	D188	B-6
IC123	C-3	D191	B-1
IC124	C-6	D264	D-1
IC125	B-8	D342	C-8
IC127	A-8	D343	E-1
IC128	B-8	D344	D-6
IC128	C-8	D345	A-9
IC129	B-3	D346	A-10
IC1400	D-10	D347	B-9
IC1401	D-2	D348	A-10
		D349	B-10
Q101	D-4	D350	B-10
Q104	E-7	D370	C-1
Q109	A-8	D378	A-10
Q115	B-1	D379	A-10
Q119	D-8	D380	B-10
Q121	C-8	D390	C-1
Q124	D-8	D393	D-2
Q129	E-2		
Q132	B-3	RV101	E-1
Q136	D-4	RV102	D-2
Q137	D-4	RV103	D-8
Q138	D-3	RV104	D-9
Q141	B-4	RV105	E-8
Q147	C-9	RV106	E-8
Q148	B-9	RV107	E-8
Q149	A-9	RV108	C-9
Q150	A-5	RV109	D-10
Q152	B-9	RV110	C-10
Q155	B-9	RV111	C-9
Q157	A-9	RV112	C-10
Q158	B-9	RV113	C-9
Q159	B-9	RV114	C-9
Q164	A-8	RV115	A-4
Q166	C-8	RV116	A-4
Q169	C-6	RV117	B-2
Q171	D-6	RV118	A-3
Q176	D-6	RV119	A-3
Q180	D-3	RV120	A-4
Q191	A-2	RV121	A-3
Q193	B-1	RV122	A-4
Q196	B-1	RV123	A-5
Q197	A-1	RV124	B-7
Q198	A-2	RV125	A-8
Q200	D-6	RV205	A-3
Q204	A-6		
Q205	A-6	TP102	B-4
Q206	A-5	TP103	C-2
Q208	B-2	TP104	B-7
Q209	A-10	TP105	B-7
Q210	B-10	TP106	B-1
Q211	B-10	TP107	B-2
Q212	B-7	TP108	B-3
Q213	C-2	TP109	B-4
Q299	A-7	TP110	D-1
		TP111	D-8
		TP112	A-5
		TP113	D-1
		TP114	B-5

B Board (B SIDE)

IC112	E-2	D101	D-5
IC124	C-4	D102	E-5
		D104	D-5
Q101	B-2	D105	E-5
Q102	E-7	D106	C-9
Q103	C-6	D108	C-10
Q105	D-6	D109	C-9
Q107	C-5	D110	D-10
Q108	D-5	D111	D-10
Q108	D-7	D112	B-10
Q112	C-9	D113	B-9
Q113	C-10	D115	D-9
Q114	C-10	D116	C-10
Q116	D-10	D117	C-10
Q117	D-2	D120	E-2
Q118	C-3	D125	A-7
Q119	A-2	D126	B-7
Q120	D-3	D127	D-8
Q122	D-3	D129	E-1
Q123	D-3	D133	A-4
Q125	E-2	D134	B-4
Q126	E-2	D136	C-2
Q127	E-3	D144	C-3
Q128	E-2	D145	C-3
Q130	D-3	D147	A-3
Q134	D-2	D148	A-2
Q135	B-5	D149	B-2
Q139	D-8	D150	C-2
Q140	D-2	D158	A-2
Q140	C-7	D159	B-2
Q142	B-7	D160	C-8
Q143	B-8	D161	C-8
Q144	A-5	D170	E-9
Q145	B-5	D171	D-9
Q146	A-2	D172	E-10
Q147	C-2	D180	C-10
Q148	A-2	D185	D-9
Q151	B-1	D187	E-9
Q152	B-2	D188	D-5
Q153	B-2	D280	B-6
Q154	B-1	D285	C-7
Q155	B-2	D341	B-10
Q156	D-8	D1380	C-8
Q157	A-2	D1381	C-8
Q159	C-2	D1382	C-8
Q160	A-2	D1400	D-1
Q165	C-3	D1401	D-9
Q167	B-3		
Q168	B-3	RV101	E-10
Q170	B-3	RV102	D-9
Q172	B-3	RV103	D-3
Q173	B-3	RV104	D-2
Q174	B-3	RV105	E-3
Q175	B-3	RV106	E-3
Q177	A-3	RV107	E-3
Q178	E-6	RV108	C-1
Q179	A-3	RV109	D-1
Q190	B-8	RV110	D-1
Q192	B-9	RV111	C-1
Q194	A-10	RV112	D-1
Q195	B-9	RV113	D-2
Q199	A-10	RV114	C-2
Q201	B-5	RV115	A-7
Q202	B-5	RV116	A-7
Q203	B-5	RV117	A-9
Q208	A-1	RV118	A-8
Q210	B-1	RV119	A-8
Q211	C-1	RV120	A-7
Q1401	D-1	RV121	A-7
		RV122	A-7
		RV123	A-5
		RV124	A-3
		RV125	A-3
		RV205	A-7

B BOARD



B -B SIDE-
SUFFIX: -31

B MOUNT (1/3) VOLTAGES

		IC		
		PAL	SECAM	NTSC
IC102	1	6.7	6.7	6.7
	2	7.1	0	0
	3	0	0	0
	4	0	0	0
	5	6.6	6.6	6.6
	6	12VA	12VA	12VA
	7	6	6	6
	8	GND	GND	GND
IC111	1	NC	NC	NC
	2	2.3	2.3	2.3
	3	2.3	2.3	2.3
	4	2.3	2.3	2.3
	5	0	2.5	2.5
	6	GND	GND	GND
	7	GND	GND	GND
	8	GND	GND	GND
	9	9.4	0	0
	10	11.5	0	0
	11	9.9	0	0
	12	11.5	0	0
	13	11.5	11.5	11.5
	14	11.5	0	0
	15	0	2.3	2.3
	16	GND	GND	GND
IC110	1	0.6	0	0
	2	2.3	0	0
	3	2	0	0
	4	2.2	2.2	2.5
	5	0	0	0
	6	GND	GND	GND
	7	GND	GND	GND
	8	GND	GND	GND
	9	11.5	11.5	11.5
	10	11.5	0	0
	11	11.5	0	0
	12	0.8	2.5	2.5
	13	1.7	1.7	1.7
	14	1.7	2.5	2.5
	15	0.8	2.5	2.5
	16	12VA	12VA	12VA
C113	1	2.8	2.8	2.8
	2	1.7	1.7	1.7
	3	2.3	2.3	2.3
	4	2.4	2.5	2.5
	5	3	3	3
	6	3	3	3
	7	4.3	4.3	4.3
	8	3	3	3
	9	NC	NC	NC
	10	2.9	2.9	2.9
	11	2.9	2.9	2.9
	12	2.6	2.6	2.6
	13	3.4	3.4	3.4
	14	GND	GND	GND
	15	3	3	3
	16	NC	NC	NC
	17	NC	NC	NC
	18	5VA	5VA	5VA
	19	2.9	2.9	2.9
	20	0	0	0
	21	NC	NC	NC
	22	2.1	2.1	2.1
	23	2.1	2.1	2.1
	24	NC	NC	NC
	25	2	2	2
	26	2.8	2.8	2.8
	27	5VA	5VA	5VA
	28	4.5	4.5	4.5
	29	2.9	2.9	2.9
	30	3	3	3
	31	1.4	1.4	1.4
	32	NC	NC	NC

		PAL	SECAM	NTSC
IC114	1	0	2.6	2.6
	2	0	2.6	2.6
	3	2	2.6	2.6
	4	NC	NC	NC
	5	NC	NC	NC
	6	GND	GND	GND
	7	GND	GND	GND
	8	GND	GND	GND
	9	11.5	0	0
	10	11.5	0	0
	11	11.5	3.7	3.7
	12	0.8	3.9	3.9
	13	1.7	3.9	3.9
	14	NC	NC	NC
	15	0.8	3.6	3.6
	16	12VA	12VA	12VA
IC115	1	0	0	0
	2	0	0	0
	3	0.4	0.4	0.4
	4	0.4	0.4	0.4
	5	NC	NC	NC
	6	GND	GND	GND
	7	GND	GND	GND
	8	GND	GND	GND
	9	11.5	11.5	11.5
	10	1.7	1.7	1.7
	11	1.7	1.7	1.7
	12	3.4	3.4	3.4
	13	1.7	3.4	3.4
	14	NC	NC	NC
	15	3.2	3.2	3.2
	16	12VA	12VA	12VA

TRANSISTOR

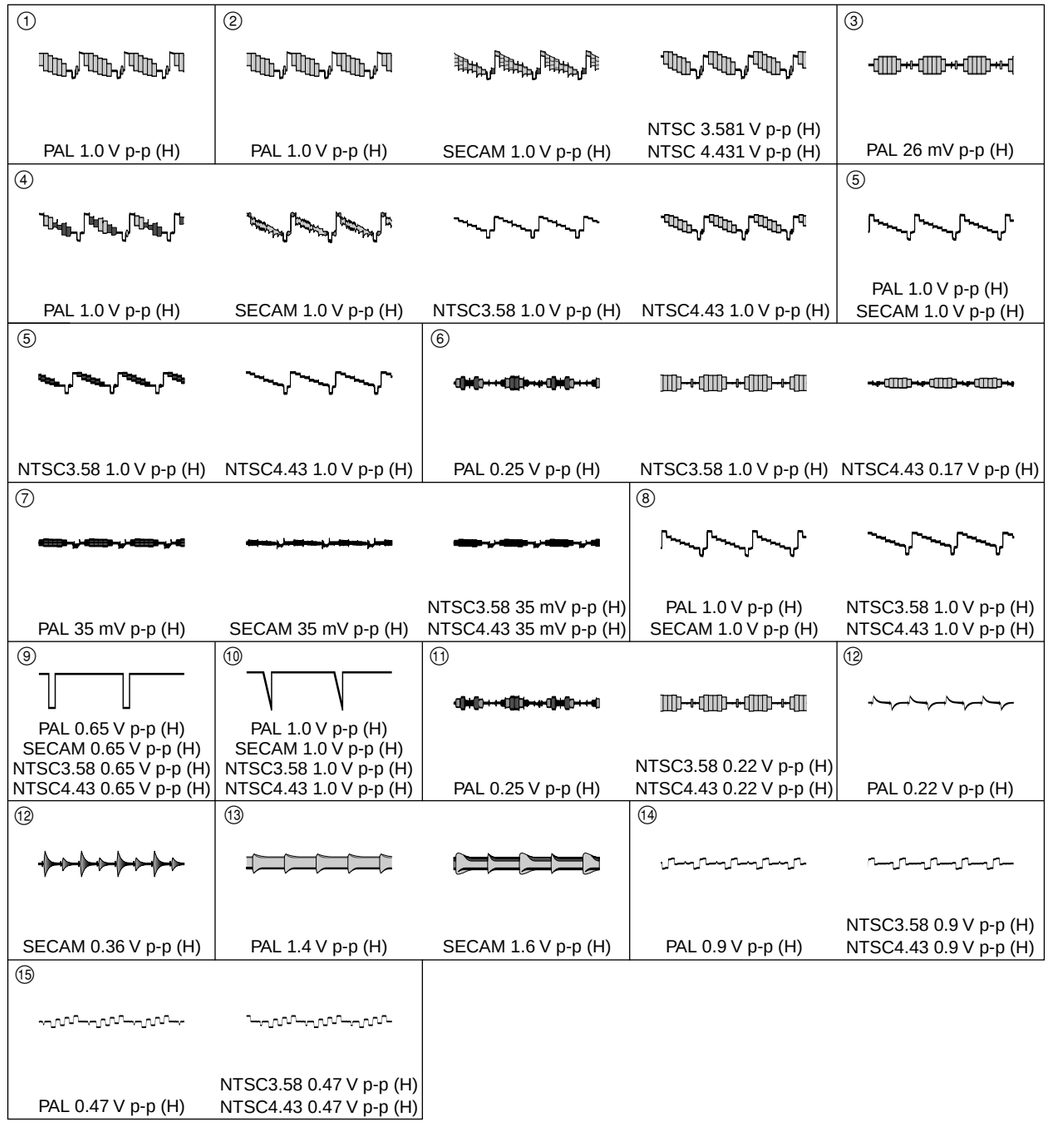
		PAL	SECAM	NTSC
Q117	B	1.7	2.5	2.5
	C	GND	GND	GND
	E	2.3	3.1	3.1
Q119	B	0	0	0
	C	GND	GND	GND
	E	0.6	0	0
Q121	B	0	2.3	2.3
	C	11.9	10.9	10.2
	E	3.1	2.5	2.5
Q122	B	1.7	1.7	1.7
	C	2.3	0	0
	E	GND	GND	GND
Q124	B	1.7	0	0
	C	GND	GND	GND
	E	0	2.3	2.3
Q125	B	0	0	0
	C	5	5	5
	E	GND	GND	GND
Q126	B	9.6	0	0
	C	0	0.8	0.8
	E	GND	GND	GND
Q200	B	11.8	11.8	11.8
	C	12VA	12VA	12VA
	E	0	0	0
Q1400	G	6.1	6.1	✻
	D	5.5	5.5	✻
	S	5.5	5.5	✻
Q1401	G	0	0	0
	D	5.4	5.4	✻
	S	0.6	0.6	0.6

- All voltages are in V (volt).
- NC: No connection.
- ✻ mark: measurement impossible.

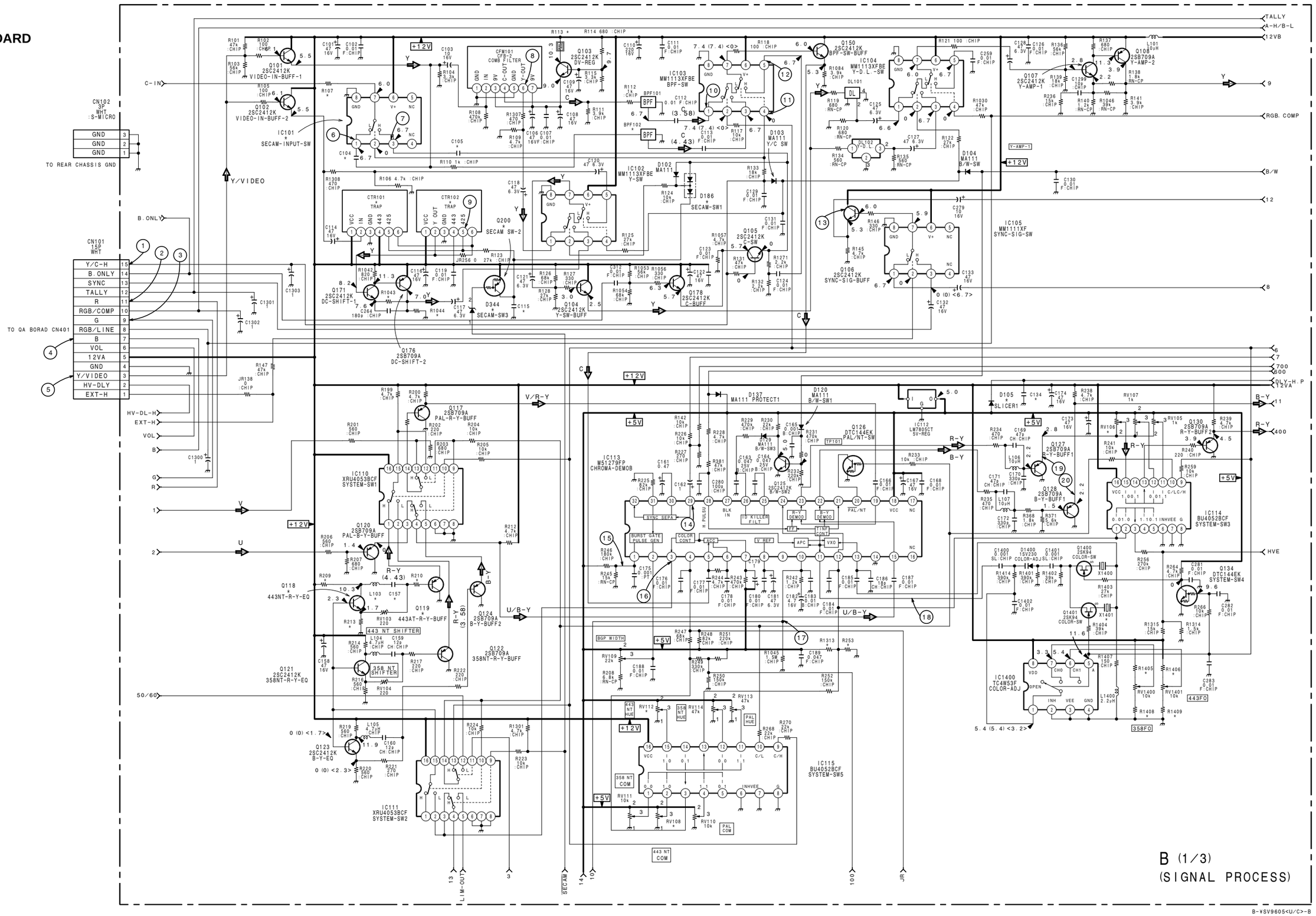
CROSS-REFERENCE OF ✻ MARKS ON B (1/3) BOARD

	PVM-8042Q (U/C) PVM-8045Q (U/C) PVM-9042QM (AEP) PVM-9042QM (AUS) PVM-9045QM (AEP) PVM-9045QM (AUS)	PVM-9045PM(BRZ)
BPF102	1-236-364-11	1-236-363-11
C104	0.01 :CHIP	NOT USED
C105	0.01 :CHIP	NOT USED
C115	0.01 :CHIP	NOT USED
C134	0.01 :CHIP	NOT USED
C157	12P :CHIP	NOT USED
CTR101	1-236-366-11	1-809-369-11
CTR102	1-236-365-11	NOT USED
D102	NOT USED	MA111
D105	MA111	NOT USED
D186	MA151WK	NOT USED
D344	DTZ-TT11-6.2A	NOT USED
IC101	MM1111XFBE	NOT USED
JR256	NOT USED	SHORT 0
L103	4.7µH	NOT USED
Q118	2SC2412K	NOT USED
Q119	2SB709A	NOT USED
Q200	DTA114EK	NOT USED
R107	27K :CHIP	NOT USED
R123	100 :CHIP	NOT USED
R209	560 :CHIP	NOT USED
R210	220 :CHIP	NOT USED
R213	560 :CHIP	NOT USED
R253	150K :CHIP	NOT USED
R1043	2.2K :CHIP	NOT USED
R1044	3.3K :CHIP	NOT USED
R1055	NOT USED	100K :CHIP
R1313	150K :CHIP	120K :CHIP
R1405	5.6K :CHIP	NOT USED
R1406	5.6K :CHIP	NOT USED
R1408	5.6K :CHIP	1K :CHIP
R1409	5.6K :CHIP	1K :CHIP
RV103	220	NOT USED
RV106	1K	NOT USED
RV108	10K	NOT USED
RV112	47K	NOT USED
X1401	1-577-259-11 OSCILLATOR, CRYSTAL	1-527-523-00 OSCLLATOR, CRYSTAL

B (1/3) BOARD WAVEFORMS



B (1/3) BOARD



S MIC Chassis

10-15 10-15

A B C D E F G H

B (2/3) BOARD WAVEFORMS

B MOUNT (2/3) VOLTAGES

		IC PAL	SECAM	NTSC
IC106	1	0	0	0
	2	0.2	0.2	0.2
	3	12VB	12VB	12VB
	4	1.8	1.8	1.8
	5	12VB	12VB	12VB
	6	12	12	12
	7	NC	NC	NC
	8	GND	GND	GND
	9	10.2	10.2	10.2
	10	1.2	1.2	1.2
	11	12	12	12
	12	1.7	1.7	1.7
	13	12VB	12VB	12VB
	14	9.8	0	0
	15	GND	GND	GND
	16	12VB	12VB	12VB
IC108	1	0.3	0.3	0.3
	2	GND	GND	GND
	3	GND	GND	GND
	4	0.4	0.4	0.4
	5	0.4	0.4	0.4
	6	GND	GND	GND
	7	GND	GND	GND
	8	GND	GND	GND
	9	8.2	8.2	8.2
	10	5.5	6	6
	11	9.8	9.8	9.8
	12	0.5	0.5	0.5
	13	0.3	0.3	0.3
	14	0.3	0.3	0.3
	15	0.3	0.3	0.3
	16	12VB	12VB	12VB
IC109	1	GND	GND	GND
	2	11.2	11.2	11.2
	3	11.6	11.6	11.6
	4	11.9	11.9	11.9
	5	11.3	11.3	11.3
	6	0.6	0	0
	7	0	0	0
	8	GND	GND	GND
	9	GND	GND	GND
	10	0.7	0.7	0.7
	11	0.4	0.4	0.4
	12	10.5	10.5	10.5
	13	9.1	9.1	9.1
	14	12VB	12VB	12VB
IC118	1	5.4	0	0
	2	2.8	0	2.8
	3	0	5.4	5.4
	4	0	0	0
	5	5.4	0	0
	6	12VB	12VB	12VB
	7	5.7	5.7	5.7
	8	GND	GND	GND
IC120	1	5.1	5.1	5.1
	2	5.1	5.1	5.1
	3	5.1	5.1	5.1
	4	5.1	5.1	5.1
	5	0.4	0.4	0.4
	6	8.3	8.3	8.3
	7	GND	GND	GND
	8	12VB	2VB	2VB
	9	12	12	12
	10	4.8	4.8	4.8
	11	5.1	5.1	5.1
	12	0.5	0.5	0.5
	13	0.4	0.4	0.4
	14	12VB	12VB	12VB

		PAL	SECAM	NTSC
IC121	1	0	5.1	5.1
	2	5.1	5.1	5.1
	3	0	0	0
	4	5.1	0	0
	5	5.1	0	0
	6	GND	GND	GND
	7	GND	GND	GND
	8	GND	GND	GND
	9	2	2	2
	10	2	2	2
	11	2	2	2
	12	5.1	5.1	5.1
	13	0	4.8	4.8
	14	5.1	5.1	5.1
	15	5.1	5.1	5.1
	16	12VB	12VB	12VB
IC 122	1	4.8	4.8	4.8
	2	4.8	4.8	4.8
	3	4.8	4.8	4.8
	4	GND	GND	GND
	5	5.1	5.1	5.1
	6	5.1	5.1	5.1
	7	5.1	5.1	5.1
	8	12VB	12VB	12VB
IC123	1	0	0.6	0.6
	2	2.5	2.5	2.5
	3	1.7	1.7	1.7
	4	GND	GND	GND
	5	5.1	5.1	5.1
	6	5.1	5.1	5.1
	7	5.1	5.1	5.1
	8	12VB	12VB	12VB
IC128	1	3	3	3
	2	3	3	3
	3	0	2.9	2.9
	4	GND	GND	GND
	5	5.3	4.6	4.6
	6	5	5	5
	7	10.4	0	0
	8	12VB	12VB	12VB

TRANSISTOR

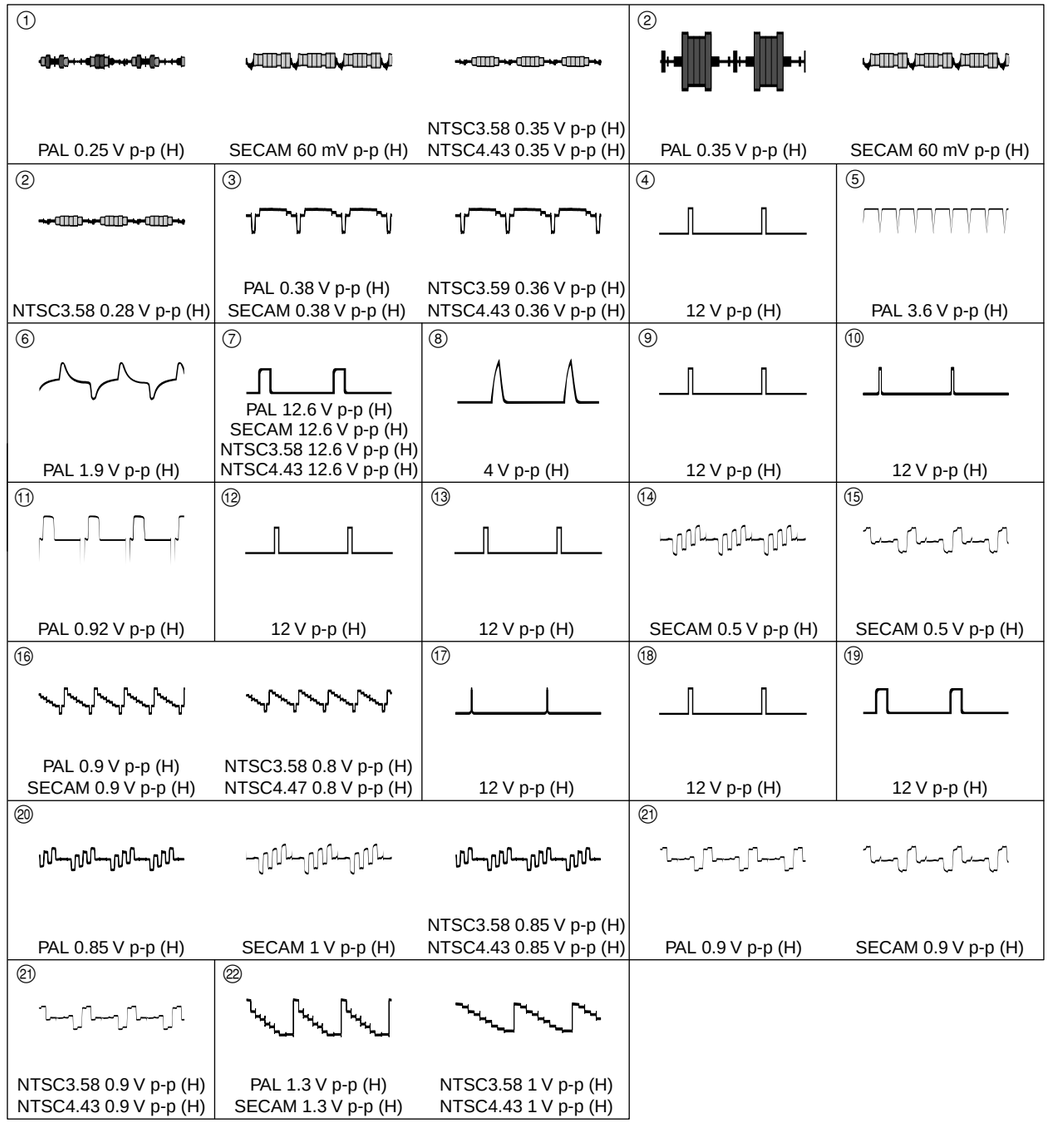
Q136	1	12VB	12VB	12VB
	2	5.7	5.7	5.7
	3	5.1	5.1	5.1
	4	10.5	10.5	10.5
	5	5.7	5.7	5.7
	6	5.1	5.1	5.1
Q137	1	12VB	12VB	12VB
	2	5.7	5.7	5.7
	3	5.1	5.1	5.1
	4	10.5	10.5	10.5
	5	5.7	5.7	5.7
	6	5.1	5.1	5.1
Q138	1	12VB	12VB	12VB
	2	5.7	5.7	5.7
	3	5.1	5.1	5.1
	4	10.5	10.5	10.5
	5	5.7	5.7	5.7
	6	5.1	5.1	5.1
Q132	B	6	6	6
	C	1.7	1.7	1.7
	E	2.3	2.3	2.3

• All voltages are in V (volt).
• NC: No connection.

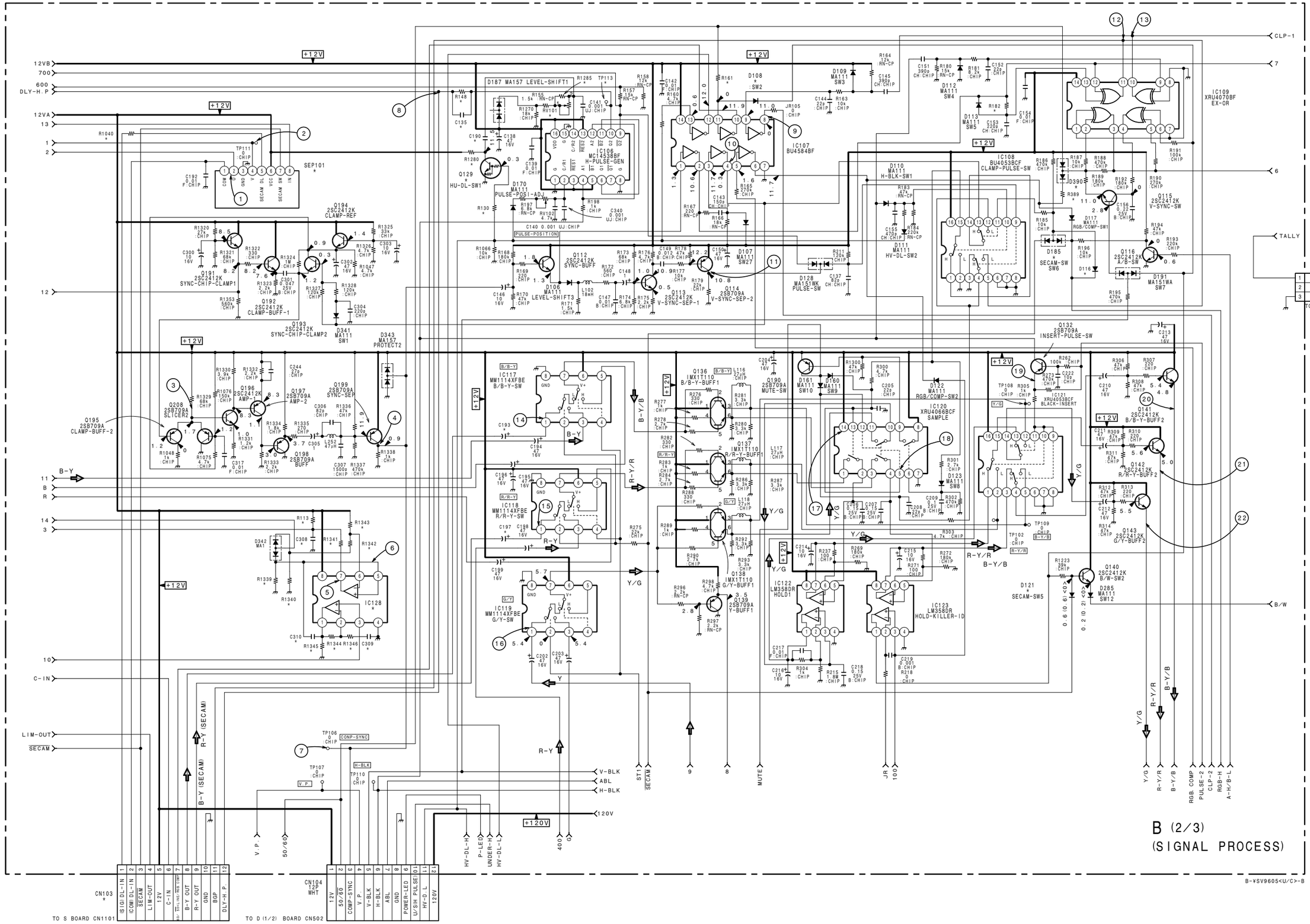
CROSS-REFERENCE OF ∗ MARKS ON B (2/3) BOARD

	PVM-8042Q (U/C) PVM-8045Q (U/C) PVM-9042QM (AEP) PVM-9042QM (AUS) PVM-9045QM (AEP) PVM-9045QM (AUS)	PVM-9045PM(BRZ)
C135	68P :CHIP	NOT USED
C190	150P :CHIP	NOT USED
C193	47 16 V :CHIP	NOT USED
C197	47 16 V :CHIP	NOT USED
C308	0.1 25 V CHIP	NOT USED
C309	0.1 25 V CHIP	NOT USED
C310	0.1 25 V CHIP	NOT USED
CN103	B to B 12P	NOT USED
D108	MA111	NOT USED
D116	NOT USED	MA111
D121	MA111	NOT USED
D185	MA151WA	NOT USED
D342	MA151WA	NOT USED
D390	MA157	NOT USED
IC128	LM358DR	NOT USED
JR113	NOT USED	SHORT 0
Q129	DTC144EK	NOT USED
R130	100K :CHIP	NOT USED
R148	6.8K :CHIP	NOT USED
R161	47K :CHIP	NOT USED
R182	20K :RN-CP	22K :CHIP-CP
R389	47K :CHIP	NOT USED
R1040	100 :CHIP	NOT USED
R1280	330K :CHIP	NOT USED
R1285	NOT USED	2.2K :CHIP
R1339	100K :CHIP	NOT USED
R1340	100K :CHIP	NOT USED
R1341	390K :CHIP	NOT USED
R1342	62K RN-CP	NOT USED
R1343	1M :CHIP	NOT USED
R1344	10K CHIP	NOT USED
R1345	1.8K CHIP	NOT USED
R1346	820 :CHIP	NOT USED
RV101	4.7K	NOT USED
SEP101	1-808-654-11	1-809-347-11
TP113	NOT USED	1-809-347-11 MODULE

B (2/3) BOARD WAVEFORMS



B (2/3) BOARD



S MIC Chassis

B MOUNT (3/3) VOLTAGES

		IC PAL	IC SECAM	IC NTSC
IC116	1	1.8	1.8	1.8
	2	1.1	1.1	1.1
	3	1.7	1.5	1.5
	4	1	0	0
	5	1.6	1.8	1.8
	6	GND	GND	GND
	7	GND	GND	GND
	8	NC	NC	NC
	9	NC	NC	NC
	10	1.8	1.8	1.8
	11	0.9	0.9	0.9
	12	1.6	1.8	1.8
	13	1.6	1.8	1.8
	14	12VA	12VA	12VA
IC124	1	4.3	4.3	4.3
	2	4.3	4.3	4.3
	3	5.2	5.2	5.2
	4	GND	GND	GND
	5	8.7	8.7	8.7
	6	2.9	2.9	2.9
	7	4.8	7.1	7.1
	8	3.1	3.1	3.1
	9	GND	GND	GND
	10	5.6	5.6	5.6
	11	5.7	5.7	5.7
	12	5.6	5.6	5.6
	13	GND	GND	GND
	14	GND	GND	GND
	15	GND	GND	GND
	16	0	0	0
	17	0	0	0
	18	0	0	0
	19	GND	GND	GND
	20	1.3	1.3	1.3
	21	0	0	0
	22	0.4	0.6	0.6
	23	0.2	0.2	0.2
	24	0.2	0.2	0.2
	25	4.2	4.2	4.2
	26	4.7	4.7	4.7
	27	4.5	4.5	4.5
	28	6.1	6.8	6.8
	29	GND	GND	GND
	30	1.7	1.5	1.5
	31	12VA	12VA	12VA
	32	5.9	5.9	5.9
	33	4.4	4.4	4.4
	34	6	6.3	6.3
	35	GND	GND	GND
	36	1.8	1.5	1.5
	37	12VA	12VA	12VA
	38	6	6	6
	39	6.2	7.5	7.5
	40	GND	GND	GND
	41	1.7	1.5	1.5
	42	12VA	12VA	12VA
	43	12VA	12VA	12VA
	44	6.2	6.2	6.2
	45	0	0	0
	46	4.7	5.1	5.1
	47	6.4	6.4	6.4
	48	6.4	6.4	6.4

		PAL	SECAM	NTSC
IC125	1	1.8	1.8	1.8
	2	1.8	1.8	1.8
	3	1.8	1.8	1.8
	4	1.8	1.8	1.8
	5	0.7	0.7	0.7
	6	0.7	0.7	0.7
	7	GND	GND	GND
	8	1.7	1.7	1.7
	9	1.7	1.7	1.7
	10	1.7	1.7	1.7
	11	1.7	1.7	1.7
	12	0.7	0.7	0.7
	13	0.7	0.7	0.7
	14	12VA	12VA	12VA
IC126	1	1.8	1.8	1.8
	2	1.6	1.6	1.6
	3	NC	NC	NC
	4	1.6	1.6	1.6
	5	1.6	1.6	1.6
	6	GND	GND	GND
	7	GND	GND	GND
	8	GND	GND	GND
	9	GND	GND	GND
	10	10.7	10.7	10.7
	11	10.7	10.7	10.7
	12	1.8	1.8	1.8
	13	0	1.7	1.7
	14	1.8	1.8	1.8
	15	1.8	1.8	1.8
	16	12VA	12VA	12VA
IC127	1	6.1	5.8	5.8
	2	1.7	1.7	1.7
	3	1.7	1.7	1.7
	4	GND	GND	GND
	5	1.7	1.7	1.7
	6	1.7	1.7	1.7
	7	6.1	5.9	5.9
	8	10.2	10.2	10.2

TRANSISTOR

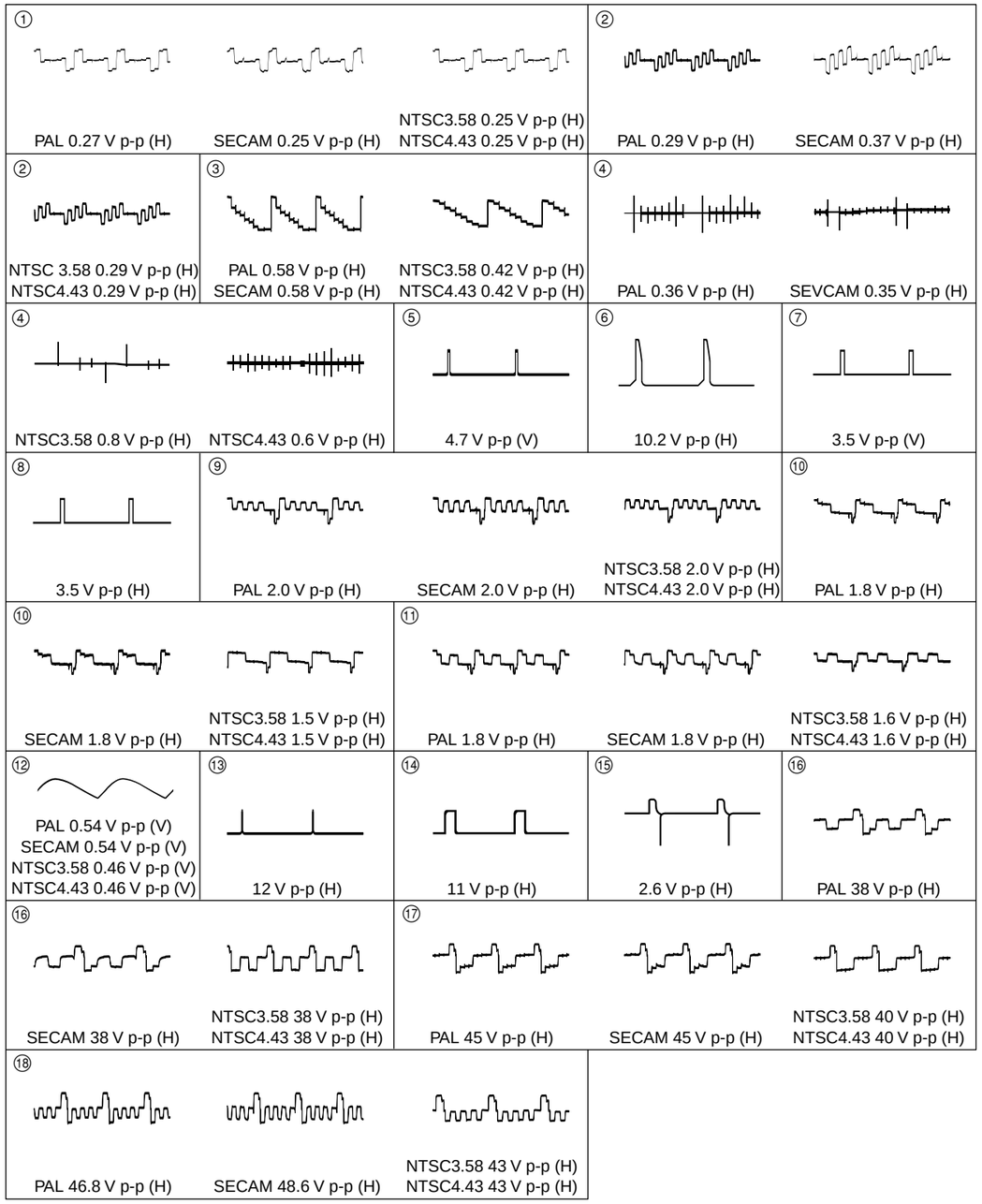
		PAL	SECAM	NTSC
Q109	B	2.5	2.5	2.5
	C	0.5	1.1	1.1
	E	GND	GND	GND
Q146	B	0.2	0.2	0.2
	C	112	112	112
	E	GND	GND	GND
Q147	B	118.3	116.9	116.9
	E	112.2	112.4	112.4
	C	120.3	119.7	119.7
Q148	B	82	84.4	84.4
	C	87.5	91.3	91.3
	E	89.2	94.4	94.4
Q149	B	88.5	89.5	89.5
	C	2.9	2.9	2.9
	E	93.2	93.2	93.2
Q151	B	83.5	85.2	85.2
	C	116.2	117.1	117.1
	E	94.5	94.5	94.5
Q152	B	98.9	99.8	99.8
	C	3	2.7	2.7
	E	92.3	93.4	93.4
Q154	B	90	92.3	92.3
	C	99.5	99.2	99.2
	E	101.2	105	105
Q155	B	98.9	99.7	99.7
	C	3	2.5	2.5
	E	94.5	95.8	95.8
Q165	B	1.1	0.8	0.8
	C	GND	GND	GND
	E	1.8	1.5	1.5
Q166	B	1.1	0.8	0.8
	C	GND	GND	GND
	E	1.8	1.5	1.5
Q167	B	1.1	0.7	0.7
	C	GND	GND	GND
	E	1.7	1.4	1.4
Q168	B	1.6	1.2	1.2
	C	GND	GND	GND
	E	2.3	1.8	1.8
Q170	B	2.4	2.1	2.1
	C	12VA	12VA	12VA
	E	1.7	1.5	1.5
Q172	B	2.4	2.1	2.1
	C	12VA	12VA	12VA
	E	1.7	1.5	1.5
Q173	B	1.8	1.8	1.8
	C	GND	GND	GND
	E	2.3	2.3	2.3
Q157	B	2.3	2.3	2.3
	C	89	89	89
	E	1.7	1.8	1.8
Q158	B	2.3	2	2
	C	98.9	99.8	99.8
	E	1.8	1.5	1.5
Q159	B	2.3	1.9	1.9
	C	98.9	99.7	99.7
	E	1.8	1.4	1.4
Q161	B	0	0	0
	C	0.5	0.5	0.5
	E	GND	GND	GND
Q189	1	4.6	5.1	5.1
	2	2.7	2.7	2.7
	3	4	3.3	3.3
	4	0	6.8	6.8
	5	0.6	0.6	0.6
	6	4	3.3	3.3
Q201	B	2	2	2
	C	GND	GND	GND
	E	2.6	2.6	2.6
Q202	B	2	2	2
	C	GND	GND	GND
	E	2.6	2.6	2.6
Q203	B	2	2	2
	C	GND	GND	GND
	E	2.6	2.6	2.6
Q204	B	2	2	2
	C	GND	GND	GND
	E	2.6	2.6	2.6
Q205	B	1.7	1.7	1.7
	C	GND	GND	GND
	E	2.3	2.3	2.3
Q206	B	1.2	1.2	1.2
	C	GND	GND	GND
	E	1.9	1.9	1.9
Q210	B	100	100.5	100.5
	C	116.2	116.7	116.7
	E	94.5	95.5	95.5
Q211	B	100	100.5	100.5
	C	116.4	116.7	116.7
	E	96.5	95.5	95.5
Q212	G	1.4	1.4	1.4
	D	1	1	1
	S	1	1	1

• All voltages are in V (volt).
• NC: No connection.

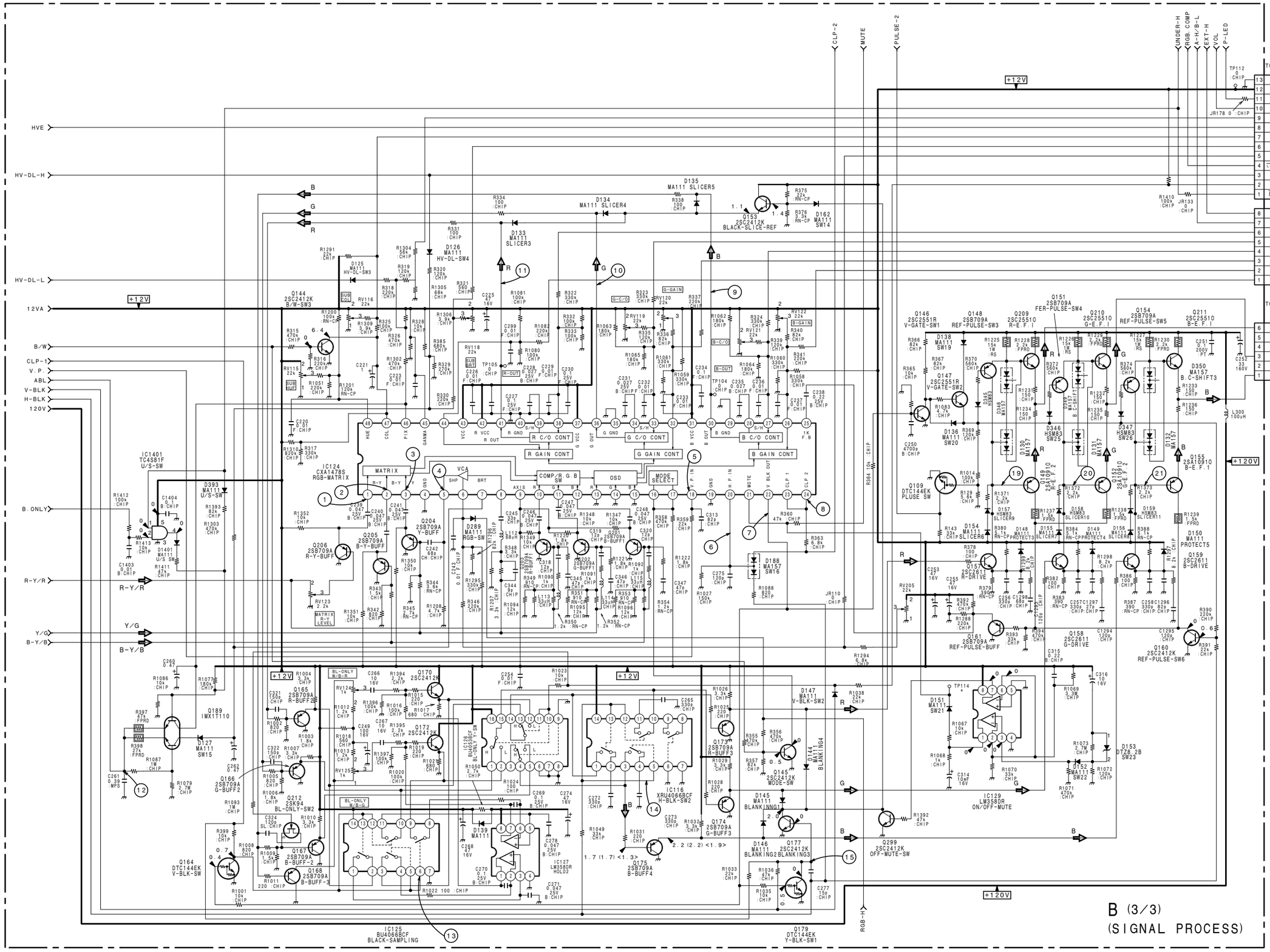
CROSS-REFERENCE OF ∗ MARKS ON B (3/3) BOARD

	PVM-8042Q (U/C)	
	PVM-8045Q (U/C)	
	PVM-9042QM (AEP)	
	PVM-9042QM (AUS)	
	PVM-9045QM (AEP)	
	PVM-9045QM (AUS)	PVM-9045PM(BRZ)
TP114	NOT USED	1-535-877-22 CHIP, CHEKER

B (3/3) BOARD WAVEFORMS



B (3/3) BOARD



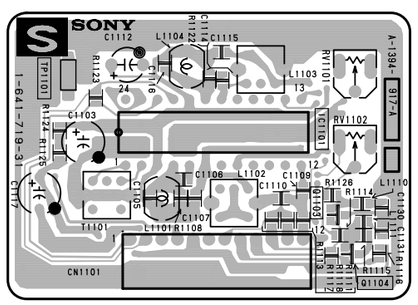
S MIC Chassis

10-19 10-19

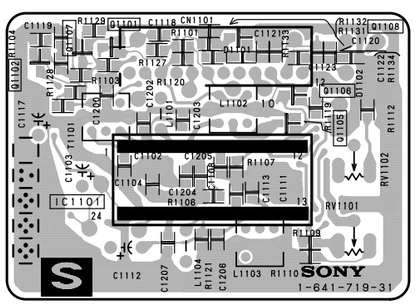
A B C D E F G H

1 2 3 4 5

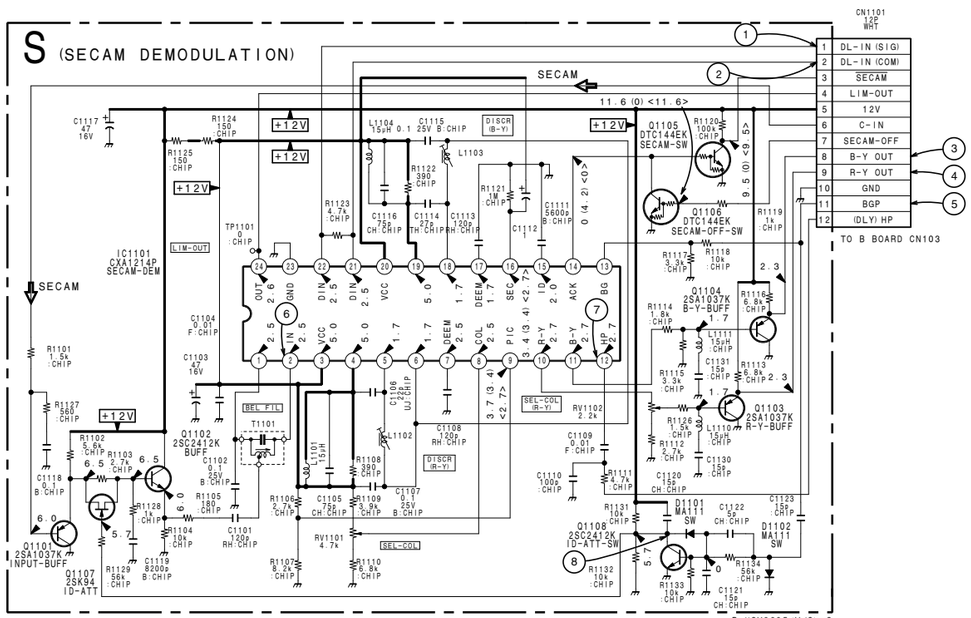
S BOARD



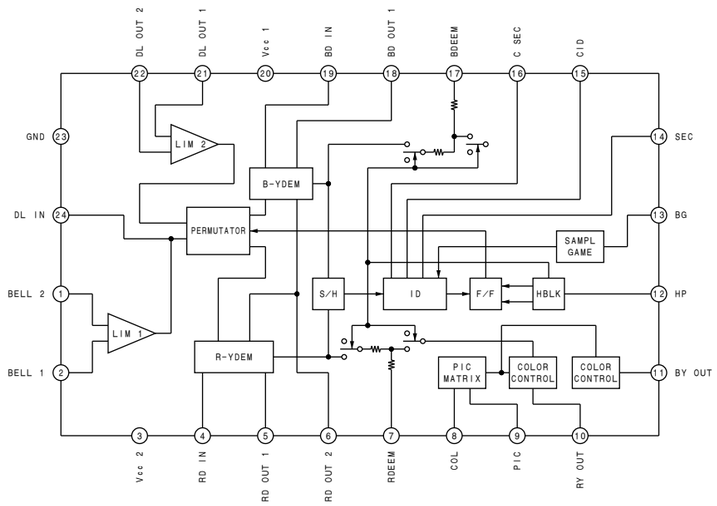
S -A SIDE-
SUFFIX: -31



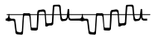
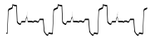
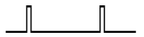
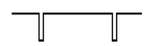
S -B SIDE-
SUFFIX: -31



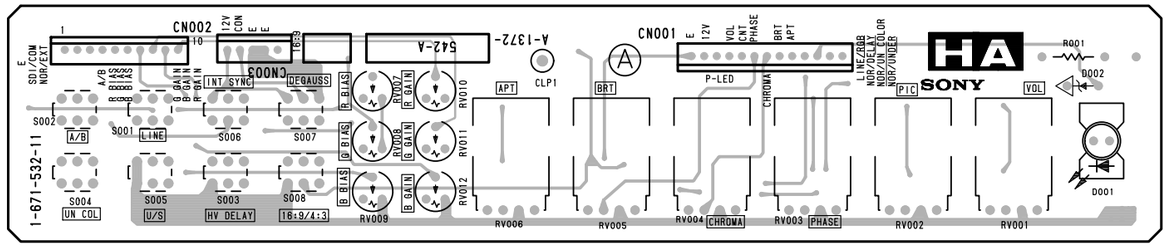
S BOARD IC1101 CXA1214P



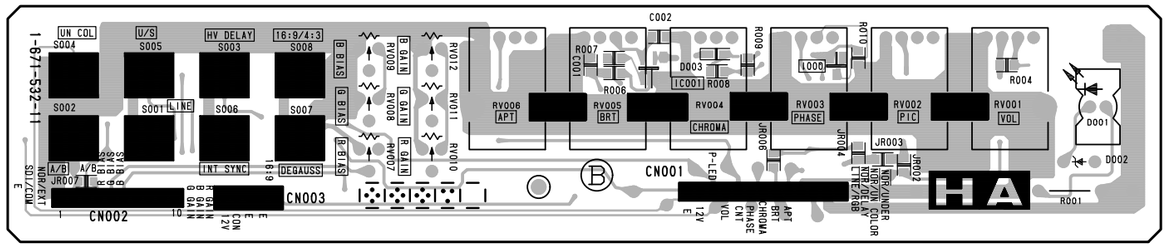
S BOARD WAVEFORMS

①  SECAM 65 mV p-p (H)	②  SECAM 72 mV p-p (H)	③  SECAM 0.6 V p-p (H)	④  SECAM 0.47 V p-p (H)
⑤  SECAM 12 V p-p (H)	⑥  SECAM 74 mV p-p (H)	⑦  SECAM 3.4 V p-p (H)	⑧  SECAM 5 V p-p (H)

HA BOARD

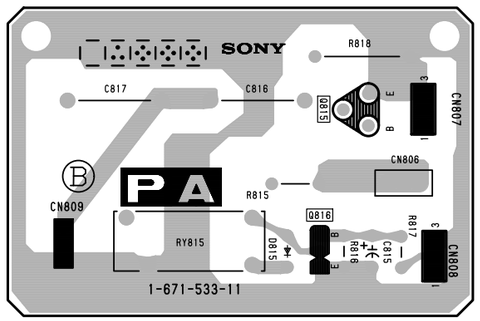


HA -A SIDE-
SUFFIX: -11



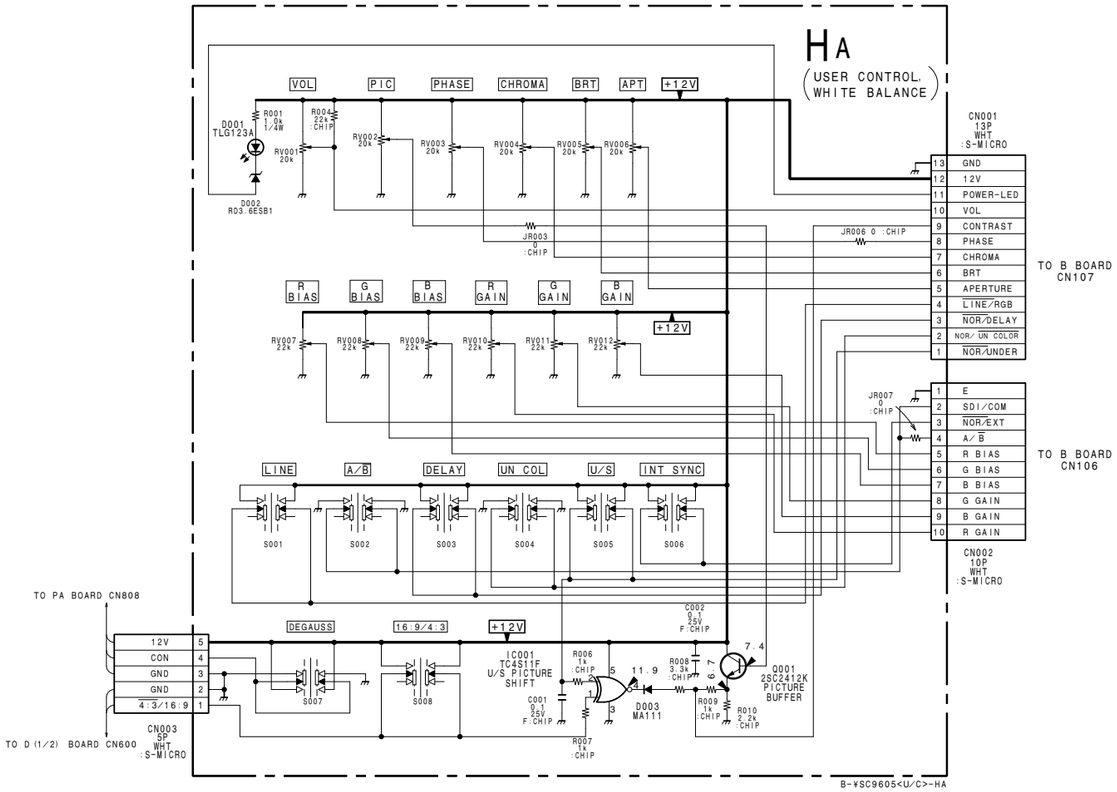
HA -B SIDE-
SUFFIX: -11

PA BOARD



PA -B SIDE-
SUFFIX: -11

HA BOARD



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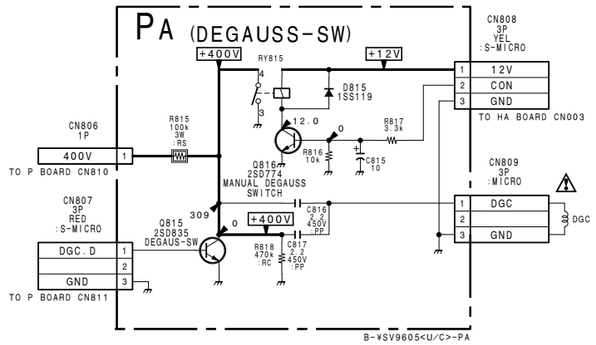
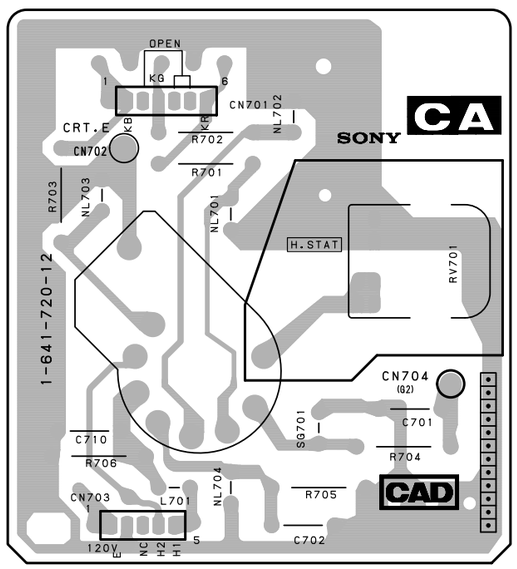


CA BOARD



CA -B SIDE-
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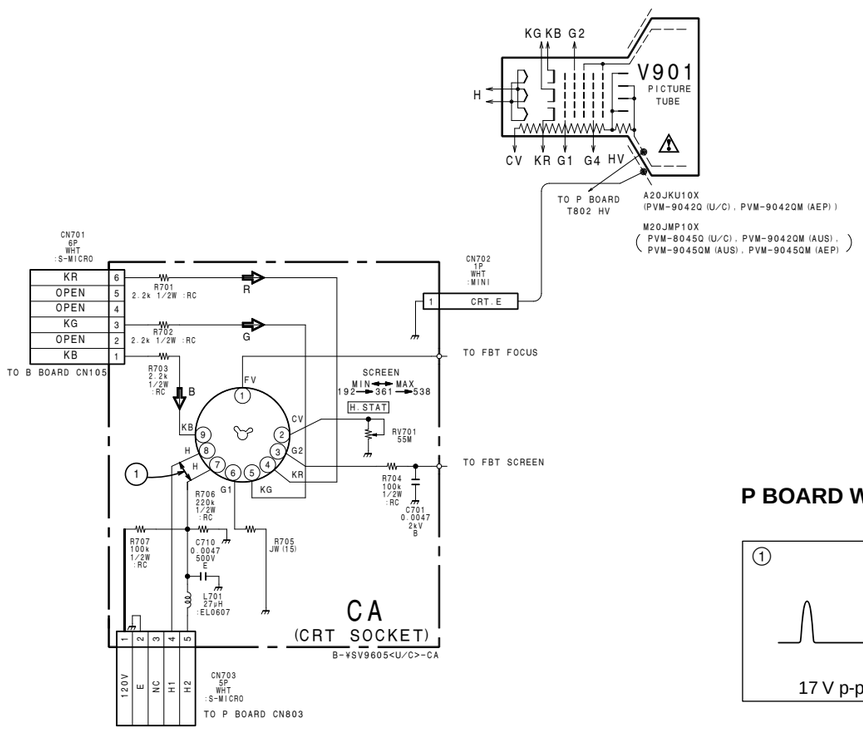

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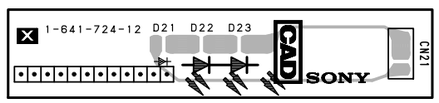

X -B SIDE-
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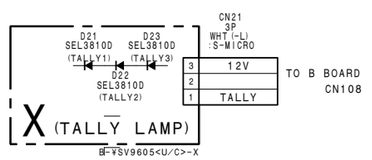

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English
98JJ0812-1
Printed in Japan

Sony Corporation
Broadcasting & Professional Systems Company

9-929-615-01